

AD-A073 541

ARINC RESEARCH CORP HONOLULU HI
SHIP SYSTEM STAGING DIAGRAMS FOR FFG-7 CLASS SHIPS.(U)
JUL 79

F/G 13/10

N00140-77-D-0417-0033

NL

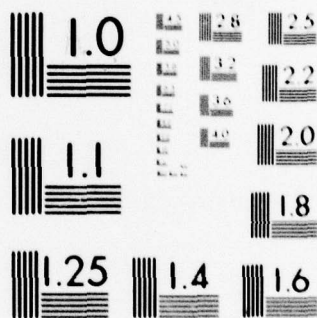
UNCLASSIFIED

1861-01-1-1979

1 OF 3

AD
A073541





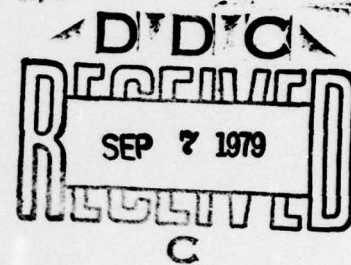
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

8 443 4950 21 31
A073541

SHIP SYSTEMS STAGING DIAGRAMS
FOR FFG-7 CLASS SHIPS

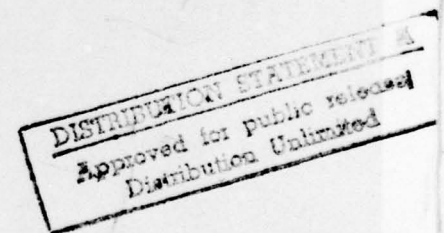
LEVEL *11*

July 1979



DDC FILE COPY

Prepared for
PERA(CRUDES)
PHILADELPHIA NAVAL SHIPYARD
Philadelphia, Pennsylvania
Under Contract N00140-77-D-0417-0033



ARINC RESEARCH CORPORATION

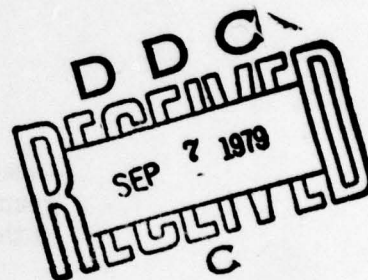


REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER (14) 1861-01-1-1979	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Ship System Staging Diagrams for FFG-7 Class Ships		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER (11) 1861-01-1-1978
		8. CONTRACT OR GRANT NUMBER(s) (15) N00140-77-D-0417-0033
9. PERFORMING ORGANIZATION NAME AND ADDRESS ARINC Research Corp. 2668 Waiwai Loop Honolulu, Hawaii 96819		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS (12) 272p
11. CONTROLLING OFFICE NAME AND ADDRESS (11)		12. REPORT DATE Jul 1979
		13. NUMBER OF PAGES 276
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) FFG-7 Class Ships Staging Diagrams		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report discusses the general properties of SSSDs (Section 2); points out the many ways SSSDs can be utilized by the various Navy activities (Section 3); and presents the SSSDs for the FFG-7 class ship (Section 4). <div style="text-align: right;">410 572</div>		

SHIP SYSTEMS STAGING DIAGRAMS
FOR FFG-7 CLASS SHIPS

July 1979

Prepared for
PERA(CRUDES)
PHILADELPHIA NAVAL SHIPYARD
Philadelphia, Pennsylvania
Under Contract N00140-77-D-0417-0033



 **ARINC** RESEARCH CORPORATION

CORPORATE HEADQUARTERS
2551 Riva Road
Annapolis, MD 91401

PACIFIC SUPPORT GROUP
2668 Waiwai Loop
Honolulu, HI 96819

Publication 1861-01-1-1979

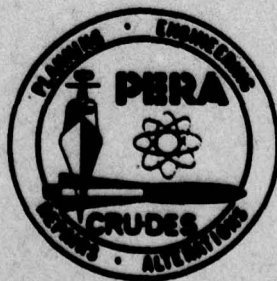
Copyright © 1979
ARINC Research Corporation

Prepared under Contract N00140-77-D-0417-0033, which
grants to the U.S. Government a license to use any material
in this publication for government purposes.

**SHIP SYSTEMS STAGING DIAGRAMS
FOR FFG-7 CLASS SHIPS**

July 1979

**PERA(CRUDES)
PHILADELPHIA NAVAL SHIPYARD
Philadelphia, Pennsylvania**



**SHIP SYSTEMS STAGING DIAGRAMS
FOR FFG-7 CLASS SHIPS**

July 1979

**PERA(CRUDES)
PHILADELPHIA NAVAL SHIPYARD
Philadelphia, Pennsylvania**

Accession For	
NTIS GRL&I	<input checked="checked" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or special
A	

ABBREVIATIONS

APL	- Allowance Parts List
ASW	- Anti-Submarine Warfare
CDC	- Component Dictionary Code
COSAL	- Coordinated Shipboard Allowance List
CPCH	- Controllable Pitch
CSMP	- Current Ship's Maintenance Project
CWI	- Continuous Wave Illuminator
DART	- Detection, Action, Response Technique
EIC	- Equipment Identification Code
EOSS	- Equipment Operational Sequencing System
FMP	- Fleet Modernization Program
GT/GTRB	- Gas Turbine
HM&E	- Hull, Mechanical & Electrical
IFF	- Identification Friend or Foe
I/O	- Input/Output
LAPL	- Lead Allowance Parts List
MDS	- Maintenance Data System
NAVAIR	- Naval Air Systems Command
NAVELEX	- Naval Electronics Systems Command
NAVSEA	- Naval Sea Systems Command
NAVSEC	- Naval Ships Engineering Center
NAVSUP	- Naval Supply Systems Command
PERA	- Planning and Engineering for Repairs and Alterations
PMS	- Planned Maintenance System
POT&I	- Preoverhaul Test and Inspection
SARP	- Ship Alteration and Repair Package
SECAS	- Ship Equipment Configuration Accounting System
SHIPALT	- Ship Alteration
SSDI	- Ship Systems Definition and Index
SSSD	- Ship Systems Staging Diagrams
SWAB	- Ship Work Authorization Boundary
SWBS	- Ships Work Breakdown Structure
SYSCOM	- Systems Command
TYCOM	- Type Commander
TTY	- Teletype
VERTREP	- Vertical Replenishment

CONTENTS

ABBREVIATIONS.	iii
1. INTRODUCTION	1
2. PROPERTIES OF SSSD	3
3. USES OF SSSD	9
3.1 SSSD Support to Ship's Force	9
3.1.1 Maintenance	9
3.1.2 Operation	10
3.1.3 Training	10
3.2 SSSD Support to Other Naval Activities	10
3.2.1 PERAs/Shipyards/Industrial Activities	10
3.2.2 Ship Equipment Configuration Accounting System (SECAS)	11
3.2.3 Technical System Commands (NAVSEA, NAVELEX)	11
3.2.4 Type Commanders (TYCOMs)	11
3.2.5 Naval Ships Engineering Center (NAVSEC)	11
3.2.6 Fleet Support Activities	11
4. SSSD FOR FFG-7 CLASS SHIPS	13
4.1 SSSD Index	13
4.2 General Comments	13
APPENDIX A: COMPONENT DICTIONARY CODE LIST	A-1

1. INTRODUCTION

↙ The Ship Systems Staging Diagram (SSSD), heretofore known as Ship Systems Definition and Index (SSDI), is an orderly identification and structuring of the systems and subsystems that make up a ship. By defining ship systems as well as their boundaries and interfaces, the SSSD provides a common language for communicating information about ship configurations. The SSSD is thus useful to all Navy activities involved in the life-cycle operation, maintenance, modernization, and support of ships.

The SSSD presented herein is a revised compilation for the FFG-7 class of Navy ships. It incorporates the latest changes to the coding identification of systems, subsystems, equipments, and components to bring them into conformance with the current SWBS/SWAB/SECAS Staging Index for Surface Ships. The Staging Index, and its supporting Component Dictionary Code, is compatible with the Ships Work Breakdown Structure and the Ship Work Authorization Boundary descriptions.

This report discusses the general properties of SSSDs (Section 2); points out the many ways SSSDs can be utilized by the various Navy activities (Section 3); and presents the SSSDs for the FFG-7 ship class (Section 4). ↗

2. PROPERTIES OF SSSD

The hierarchical concept on which the Ship Systems Staging Diagram is based is illustrated in Figure 1. As can be seen, the SSSD is structured such that the summation of SSSD items at any level defines the total ship. An actual application of Figure 1, showing a typical ship breakdown from the major system to the sub-subsystem level, is presented in Figure 2.

As illustrated by Figures 1 and 2, the SSSD is structured to:

- a. Provide a multi-level breakdown of the ship's configuration.
- b. Completely define the ship at each level.
- c. Contain no redundancies in its definition of the ship.
- d. Utilize the Ships Work Breakdown Structure. This provides a standard language based on the same nomenclature and coding system mandatory for use on a Navy-wide basis.
- e. Utilize a standard Navy Staging Index for fourth-level identification codes and a standard Navy Component Dictionary Code List (see Appendix A) for assigning fifth-level identification codes. The last two characters of the identifier are from this list, e.g., 2612M7.
- f. Tailor the SWBS to the configuration of a specific ship class. The ship class diagrams can in turn be tailored to the configuration of each ship within the class.

Figure 3 extends a portion of Figure 2 to an additional level of detail to demonstrate the information provided in the SSSD. As shown, the following are identified:

- a. System equipments
- b. System boundaries
- c. Shipboard maintenance work centers
- d. Unique seven-place alphanumeric EICs that have been assigned through 26 March 1979.

In some cases, notably for the more complex systems, this SSSD provides still further information in the form of line diagrams that depict:

- a. Major hardware items within the system boundaries, and their interrelationships.

- b. The verbal description shown on the system diagrams for selected SWBS-coded items. Those systems which are complex and interface with other complex systems are diagrammed as Figure 4 indicates.
- c. The selected system's boundaries and interrelated SWBSs.

Although some of the line diagrams show functional relationships, their specific purpose is to aid in the identification of ship systems. For that reason, the diagrams are greatly simplified from the actual configuration.

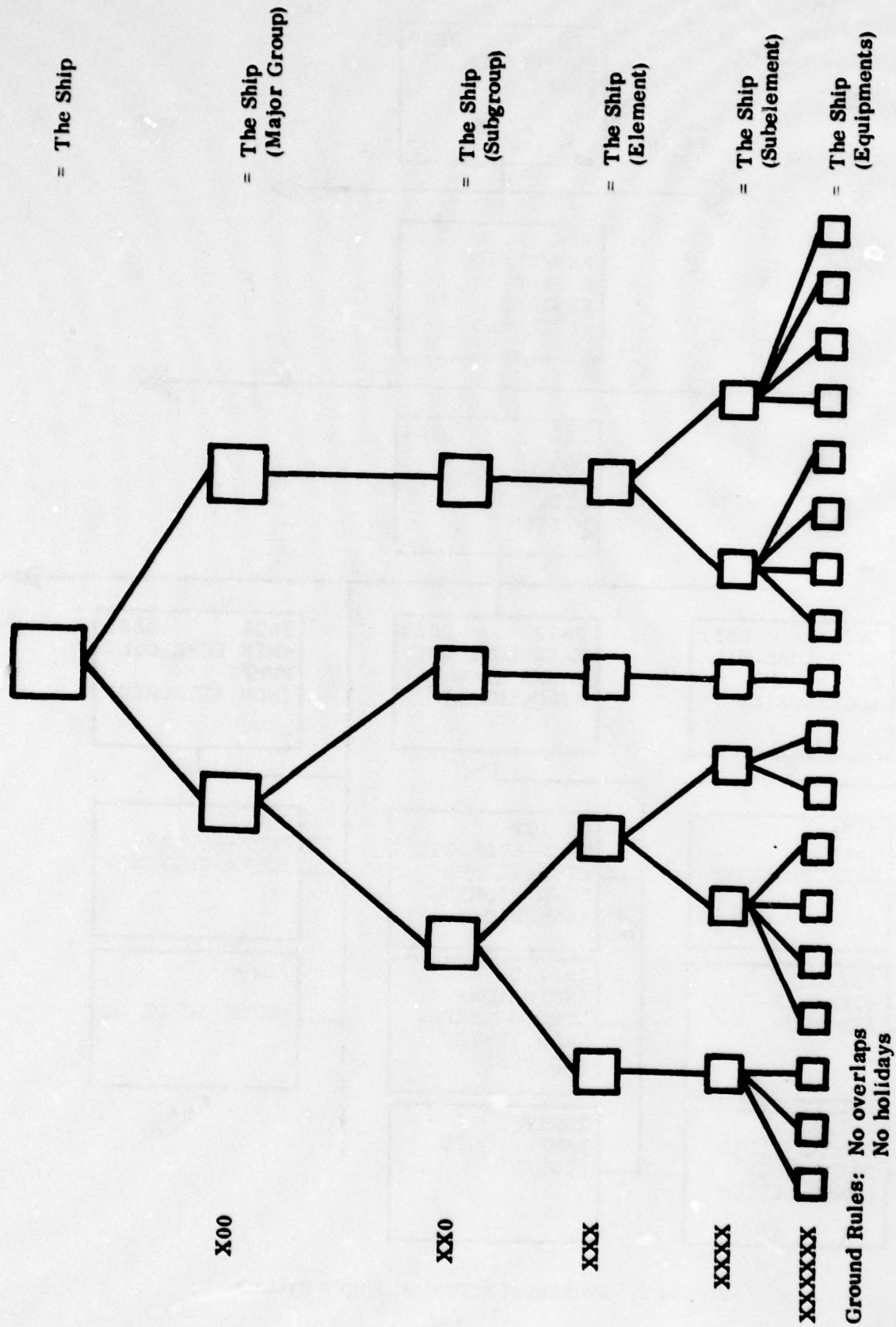


Figure 1. SSSD Concept

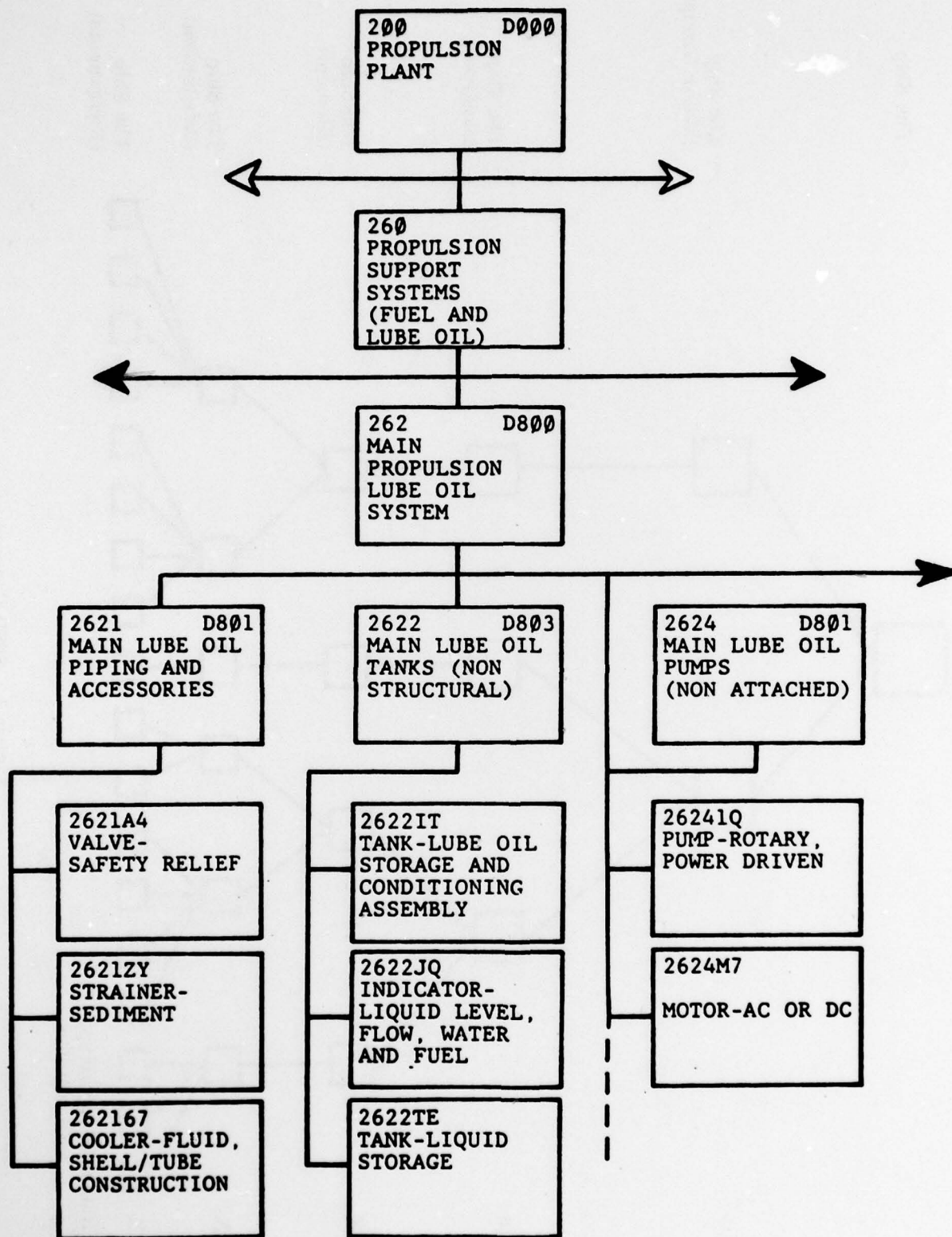


Figure 2. Portion of a Typical Ship's System

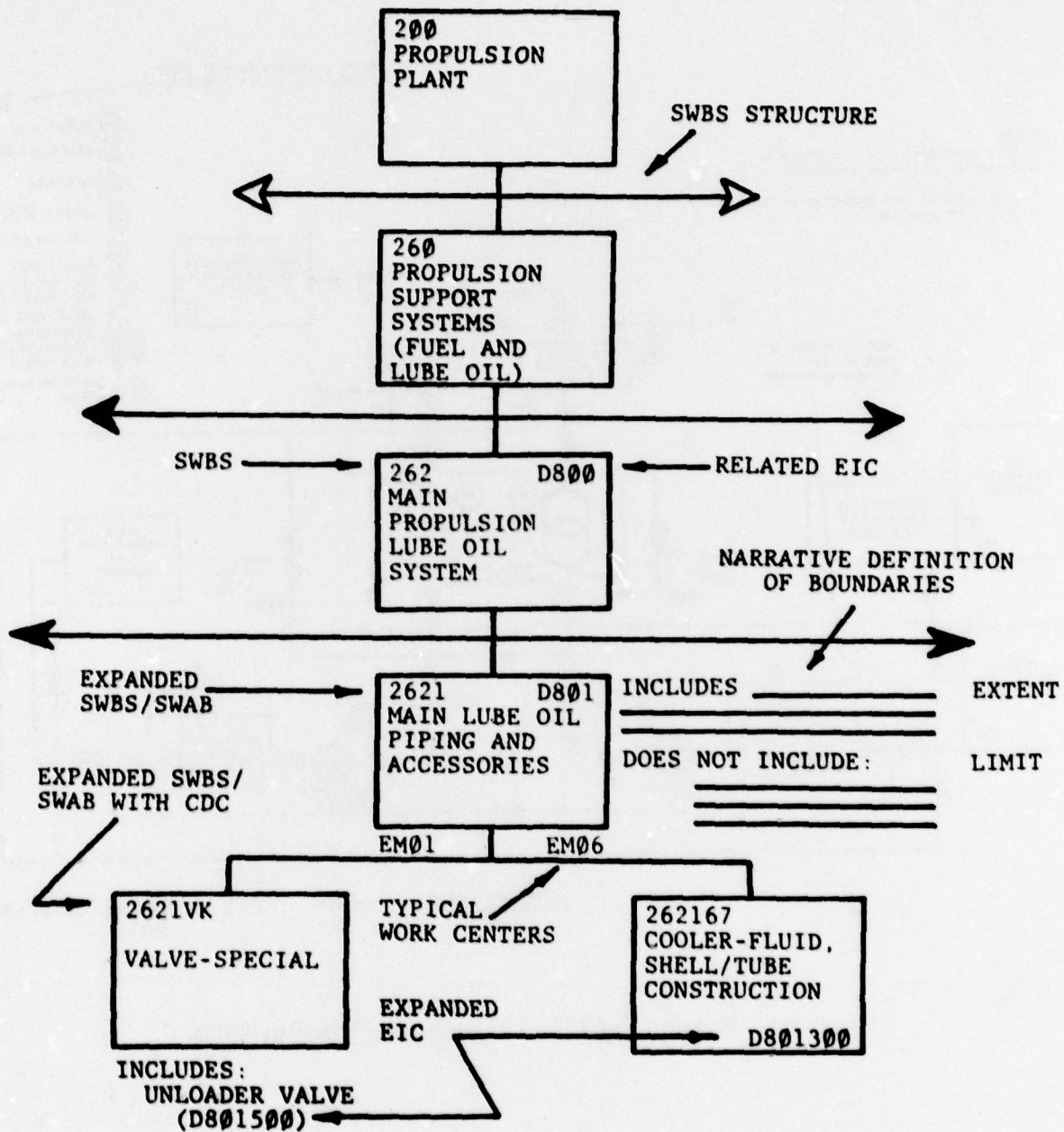


Figure 3. Example of System Diagrams Included in SSSD

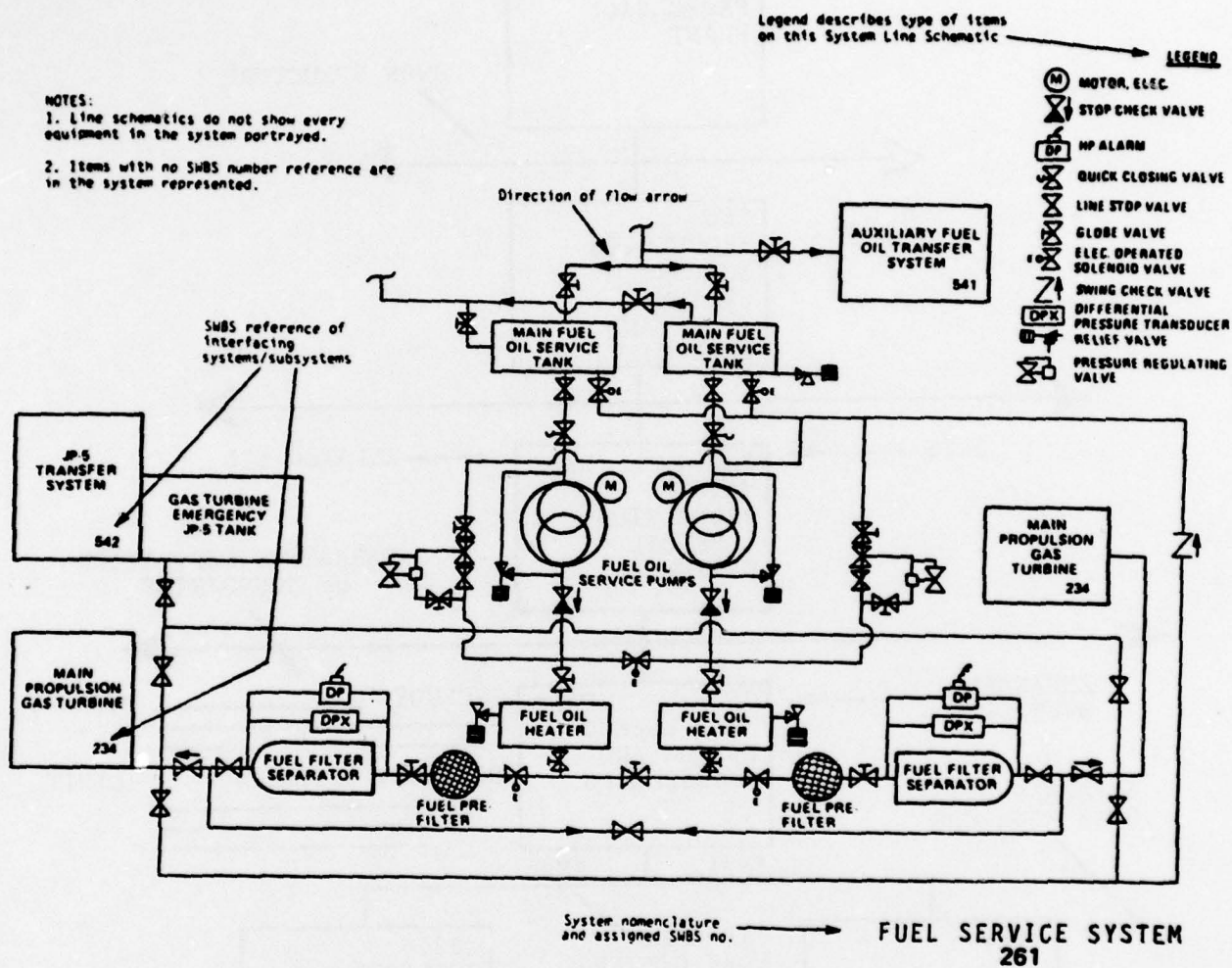


Figure 4. Example of Line Diagrams Included in SSSD

3. USES OF SSSD

Throughout a ship's life, ship's force personnel submit a vast amount of system, equipment, and parts information to their type commander and fleet support activities. Requests for alteration, reports of maintenance action, work requests, and parts requisitions are but a few examples. In each instance the submitted information must be related to a specific, definable portion of the ship.

In carrying out their responsibilities, the type commander and the support activities must not only identify a specific item within the total ship, but also be aware of its interfaces. In planning alterations or modifications, for example, the technical systems commands (NAVSEA, NAVELEX, NAVAIR) must be able to identify the various systems that will be affected by a particular change to a ship's configuration. Also, when preparing for overhaul or other availabilities, the type commander and repair activities must be able to organize a work package on the basis of specific as well as interrelated ship systems. This is done to ensure that the work package is completely and effectively defined.

Since so many activities are involved in supporting the ship, it is necessary that both ship and support personnel use a single, uniform language when communicating configuration information. The Ship Systems Staging Diagram provides this common language by describing a specific ship in terms common to all ships of the fleet. Potential uses of the SSSD are outlined below.

3.1 SSSD SUPPORT TO SHIP'S FORCE

3.1.1 Maintenance

- a. Serves as a checklist for planning and conducting inspection.
- b. Provides the basis for comparing repair items with alterations.
- c. Aids in establishing repair priorities.
- d. Assists in identifying shipyard, intermediate maintenance activities, and ship's force interfaces.
- e. Assists in making manpower assignments by ensuring that all systems of the ship are considered.
- f. Aids ship's force in "buttoning up" all systems for post-repair testing.
- g. Aids in alteration planning and analysis by showing possible interfaces in terms of various ship systems.

- h. Aids in standardizing shipboard validation procedures.
- i. Provides a means of identifying deficiencies in shipboard documentation such as the Coordinated Shipboard Allowance List (COSAL), Planned Maintenance System (PMS), etc.
- j. Provides a capability for reducing duplication in validation programs.
- k. Assists in identifying Equipment Identification Codes (EIC) necessary for Current Ship's Maintenance Project (CSMP) and Maintenance Data System (MDS).
- l. Provides a standard language for maintenance documentation.
- m. Provides a common set of system descriptions for the development of maintenance instructions (PMS) and operating instructions (Equipment Operational Sequencing System, EOSS).

3.1.2 Operation

- a. Serves as a checklist for determining the completeness of EOSS coverage.
- b. Provides a means of identifying interrelationships among operating systems.
- c. Identifies the boundaries for system testing.
- d. Provides a means of determining test equipment and support requirements.

3.1.3 Training

- a. Provides a disciplined method for displaying a ship's configuration, thereby identifying training requirements from the equipment through the system level.
- b. Supports training shipboard operation/maintenance personnel in ship systems and system interfaces.

3.2 SSSD SUPPORT TO OTHER NAVAL ACTIVITIES

3.2.1 PERAs/Shipyards/Industrial Activities

- a. Defines ship systems for alteration and repair planning.
- b. Provides a standard indexing language for:
 - Ship Alteration and Repair Package (SARP)
 - Specification preparation
 - Cost estimating
 - Drawing numbering
 - Material identification and ordering

- Pre-Overhaul Test and Inspection (POT&I) planning and organization
- Management information systems.
- c. Assists in determining priorities of work by displaying the affected equipment in relation to its system.

3.2.2 Ship Equipment Configuration Accounting System (SECAS)

- a. Provides a standard structure for total shipboard validation.
- b. Provides information for determining the desired level of validation.

3.2.3 Technical System Commands (NAVSEA, NAVELEX)

- a. Aids in determining the SWBS identification of alterations for inclusion in shipalt records and subsequently in other Navy data bases.
- b. Identifies ship systems such that the impact of alterations can be determined and decisions made concerning recommended priorities for inclusion in the Fleet Modernization Program (FMP).
- c. Provides a means for ensuring that standard failure-data correlation and analysis is performed to the desired level.

3.2.4 Type Commanders (TYCOMs)

- a. Aids in determining work priorities by displaying the affected equipment in relation to its system.
- b. Identifies the system such that the impact of alterations can be determined and decisions made concerning recommended priorities for inclusion in the FMP.
- c. Enables the TYCOM to properly identify and budget the system for repairs.

3.2.5 Naval Ships Engineering Center (NAVSEC)

- a. Provides a vehicle for ensuring that standard failure-data correlation and analysis is performed to the desired level.
- b. Defines the systems for design consideration and subsequent corrective measures such as the Detection, Action, Response Technique (DART) program.
- c. Provides information for determining the required level of repair parts support requirements.

3.2.6 Fleet Support Activities

- a. Identifies shipboard systems as an aid in determining personnel and material requirements in response to solving specific ship problems.
- b. Serves as a tool for establishing required support capabilities (people and equipment).

4. SSSD FOR FFG-7 CLASS SHIPS

4.1 SSSD INDEX

The SSSD for FFG-7 class ships is presented in the following pages, in the indicated order.

<u>Index Diagrams</u>	<u>Page</u>
Overall	19
100 - Hull Structure	20
200 - Propulsion Plant	21
300 - Electric Plant	22
400 - Command and Surveillance	23
500 - Auxiliary Systems	24
600 - Outfit and Furnishings	25
700 - Armament	26
800 - Integration/Engineering	27
900 - Support Services	28
<u>Legend of Symbols</u>	29
<u>System Diagrams</u>	
100 - Hull Structure	31
200 - Propulsion Plant	39
300 - Electric Plant	65
400 - Command and Surveillance	83
500 - Auxiliary Systems	137
600 - Outfit and Furnishings	203
700 - Armament	229
800 - Integration/Engineering	241
900 - Support Services	247

The Legend of Symbols applies to the line diagrams that accompany certain of the system diagrams.

4.2 GENERAL COMMENTS

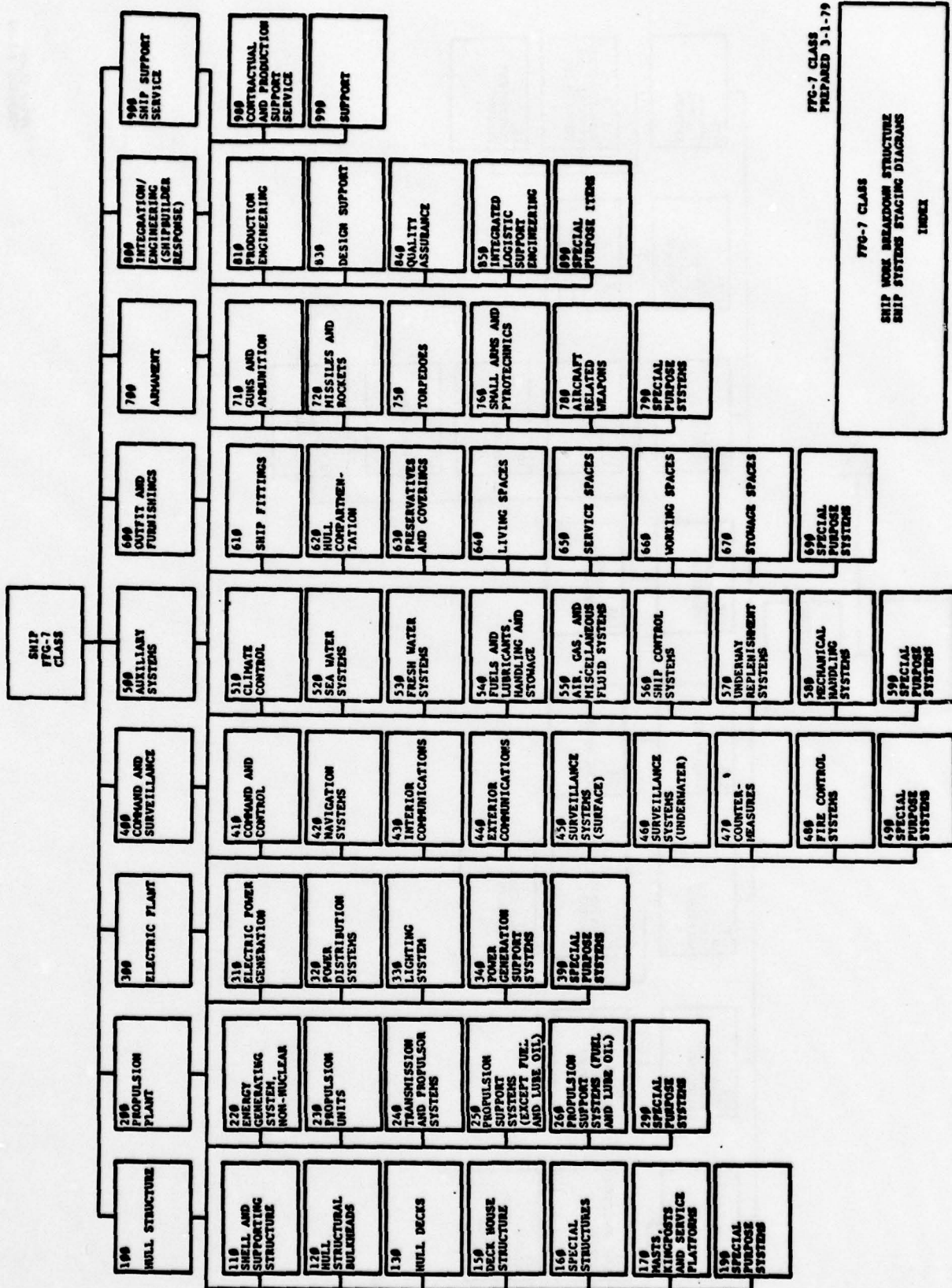
The following general comments apply to the FFG-7 class SSSD.

- a. The SSSD is structured to encompass the entire FFG-7 class, i.e., all identified combinations of systems and equipments have been included. Individual ships will not necessarily have all identified components because of such factors as ship alterations that have/have not been accomplished, variations due to construction differences, etc.

- b. In each SWBS group, elements X01 through X09 denote general requirements. These non-hardware elements are indicated by dashed blocks.
- c. To maintain continuity of having APL number identifiable equipments/components at the fifth level, some element titles are repeated at the fourth and fifth levels and appropriately numbered, e.g., element 163.
- d. The term "With System", or "W.S.", indicates that the item is coded with the system of which it is a part or which it serves.
- e. EIC cross-references are entered only in, or under, blocks with a direct cross-reference, i.e., same system, subsystem, and/or equipment.
- f. Work center assignments are representative. Use of the SSSD for specific ships of the class will require verification of applicable work centers.
- g. The following guidelines have been applied in the assembly of the FFG-7 class SSSD to classify equipment components and accessory items, and may be further utilized to categorize items not specifically addressed in this compilation:
- Foundations, interconnecting and local power cabling to protective devices, and mechanical and non-general-purpose electrical hull fittings are included in the supported system.
 - Penetrations and inserts into structural members are included in the requiring system.
 - Piping and electrical cable markings are included in the served system.
 - Hydraulic control valves and associated hydraulic piping, including hydraulic valve actuators, cylinders, pumps, and motors, are considered part of the system in which found.
 - Valve actuators (electrical, pneumatic, and mechanical) are included in the supported system.
 - Service air piping normally includes all piping up to and including the isolation valve off the service air header. However, in those cases where piping runs directly to the serviced equipment, the system interface is at the inlet flange of the unit.
 - Seawater and auxiliary fresh water piping systems that support electronic equipment heating and cooling subsystems include piping and associated valves up to and including the flanges that interface with the subsystems.
 - Electric motors are included in the driven system, along with foundations, resilient mounts, controllers/starters (when not a part of a group-control switchboard), and the local cabling to power panel protection devices.

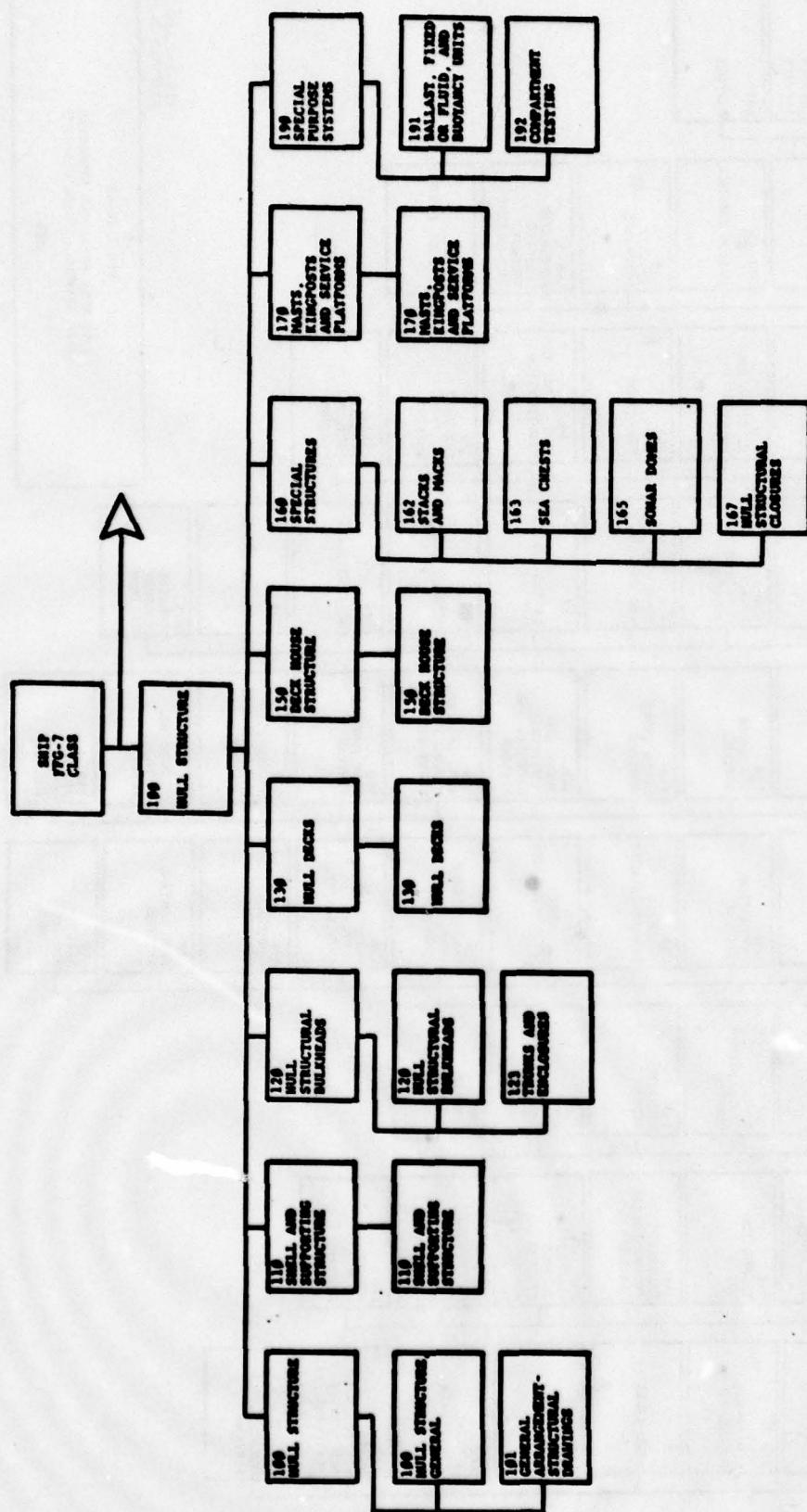
- Electronic signal cabling that cross-connects two or more systems, such as gyrocompass information or blanking pulses, is included in each of the supported systems (radio, sonar, ECM, radar, etc.).
- Built-in tanks that have at least one surface homogeneous with the principal hull structure are included in the structural group. All other tanks are considered part of the served system.
- Air duct air-conditioning coils, including inlet-outlet flanges, are considered part of the ventilation system. Piping to these coils is included in either the chilled water or air-conditioning system as appropriate.
- Items such as hull fasteners, pipe hangers, handwheels, label plates, flexible connections, and resilient/sound isolation mounts are considered part of the supported system.
- Elements attached to or integral parts of a system component are generally considered parts of the component and belong to that system (e.g., gas turbine lube oil and fuel pumps and sensor devices) except in those few cases where SWBS grouping calls for separate treatment.
- Attached or local indicating instrumentation is included in the supported system. Remote reading instrumentation, where part of a generalized indicating system serving more than one individual system, 1) will be grouped with the console/switchboard of which it is a part, or 2) may be a part of an interior communications sensing system.
- Fluid coolers to the inlet/outlet flanges for the heat removal medium are included in the system having the requirement for heat removal. A heat exchanger is generally grouped with the system that receives the major benefit from its use, or which could not function without it.
- The energy storage subsystems (storage batteries, trays, holddowns, cabling, automatic battery rechargers, etc.) have been included with the associated systems. This logic has been applied to energy storage (battery) subsystems in ship's boats, emergency lanterns, torpedoes, gyrocompass, ship's service telephone system (when installed), etc.

**SHIP SYSTEMS STAGING DIAGRAMS
FOR FFG-7 CLASS SHIPS**

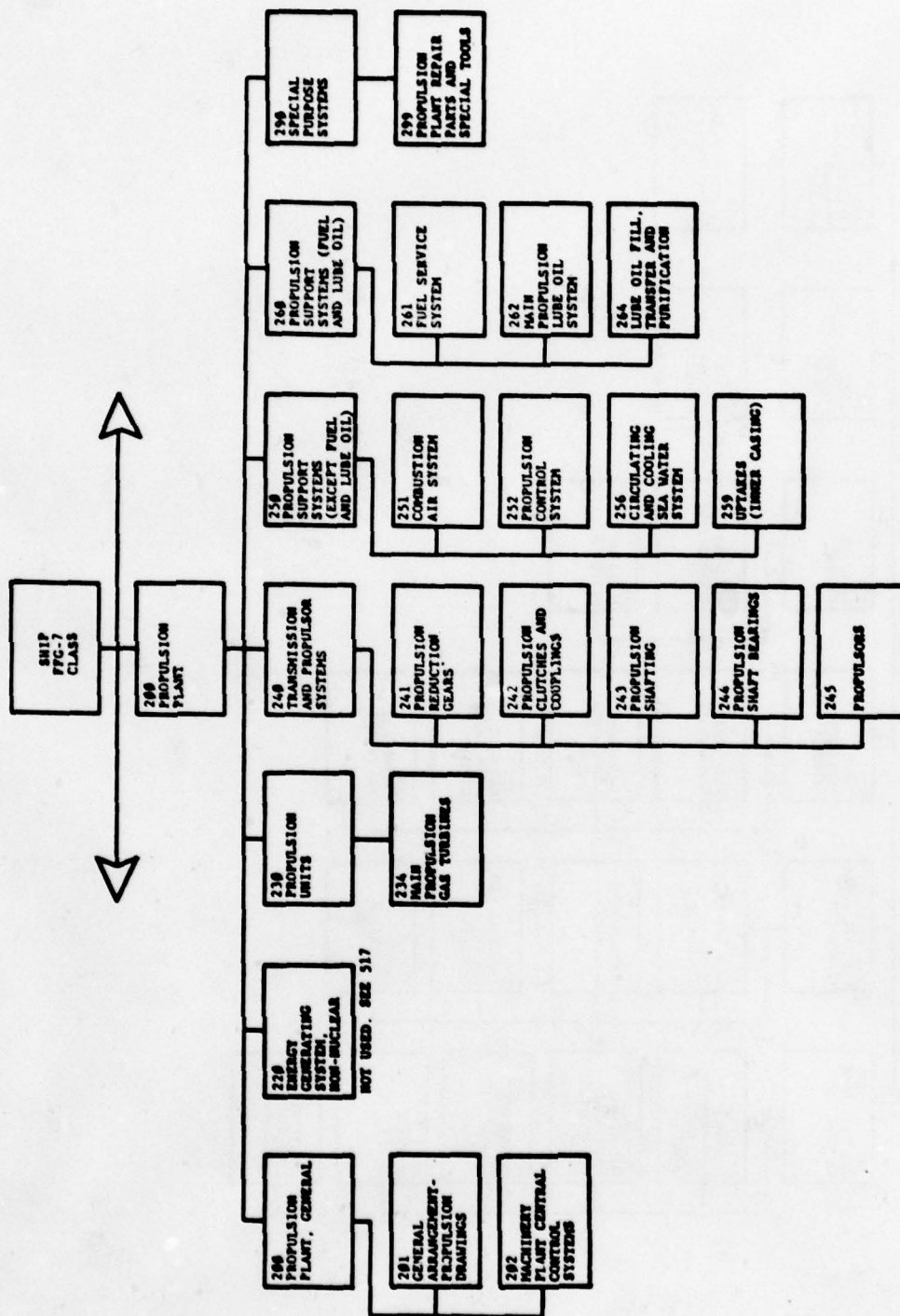


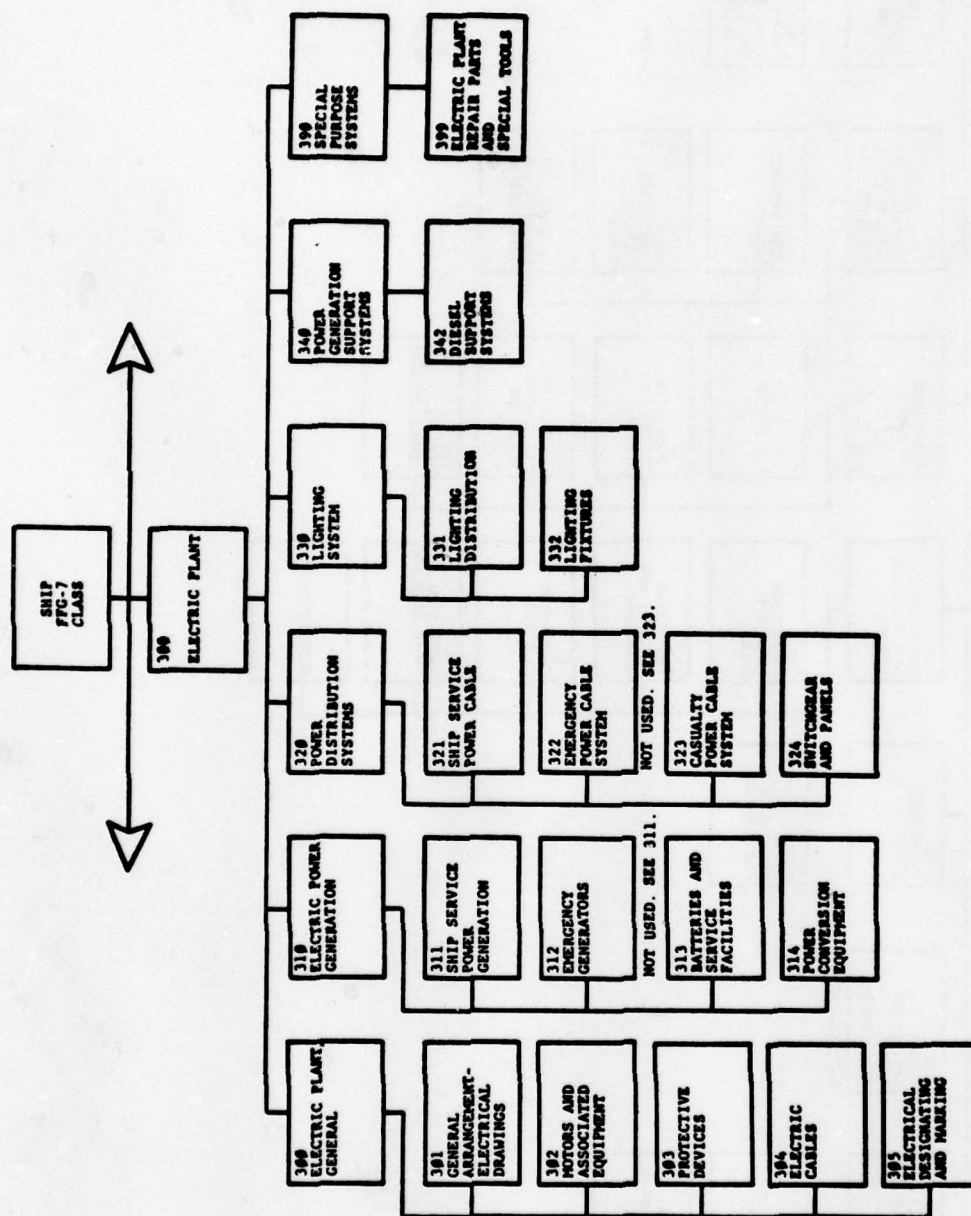
FFG-7 CLASS
PREPARED 3-1-79

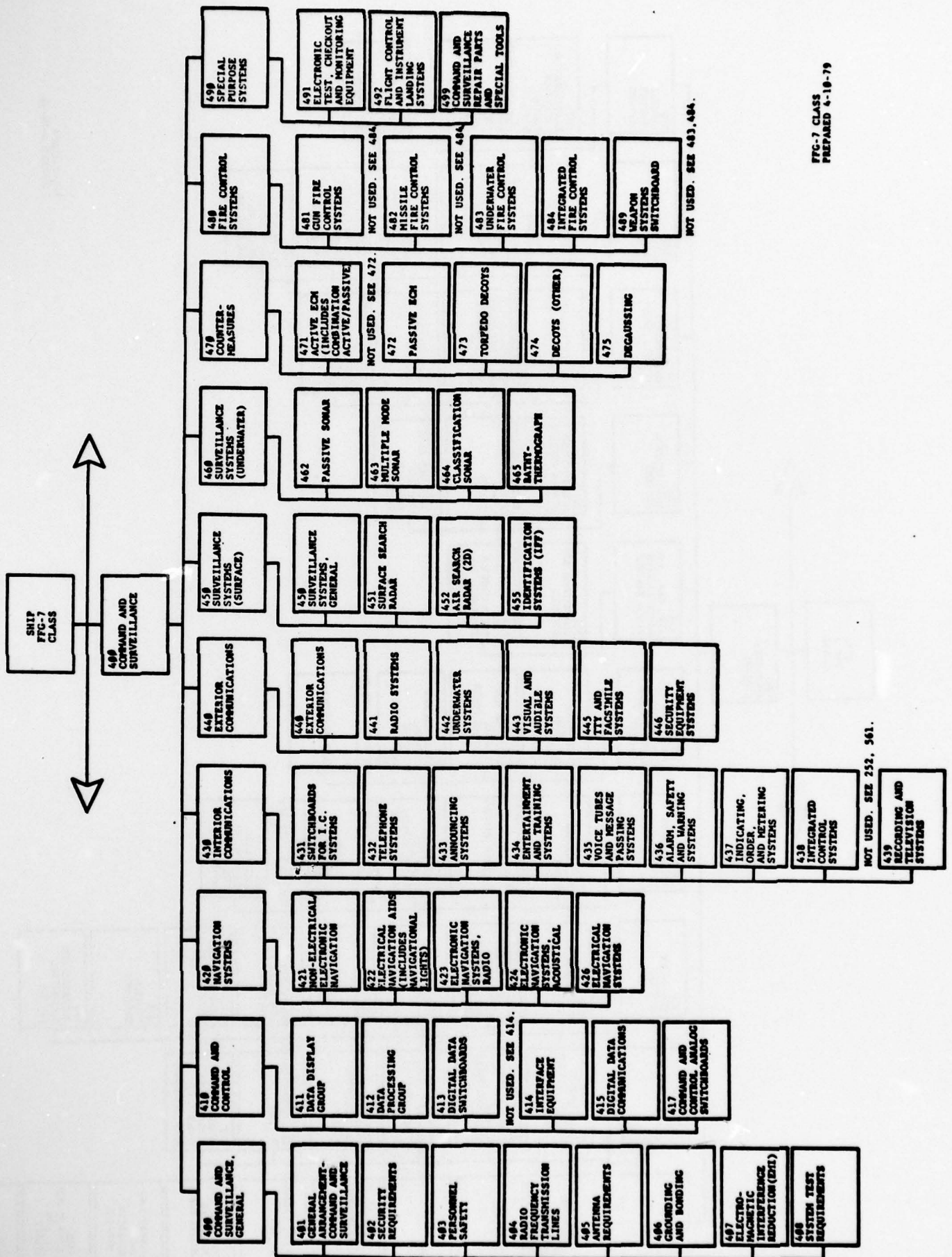
FFG-7 CLASS
SHIP WORK BREAKDOWN STRUCTURE
SHIP SYSTEMS STAGING DIAGRAMS
INDEX



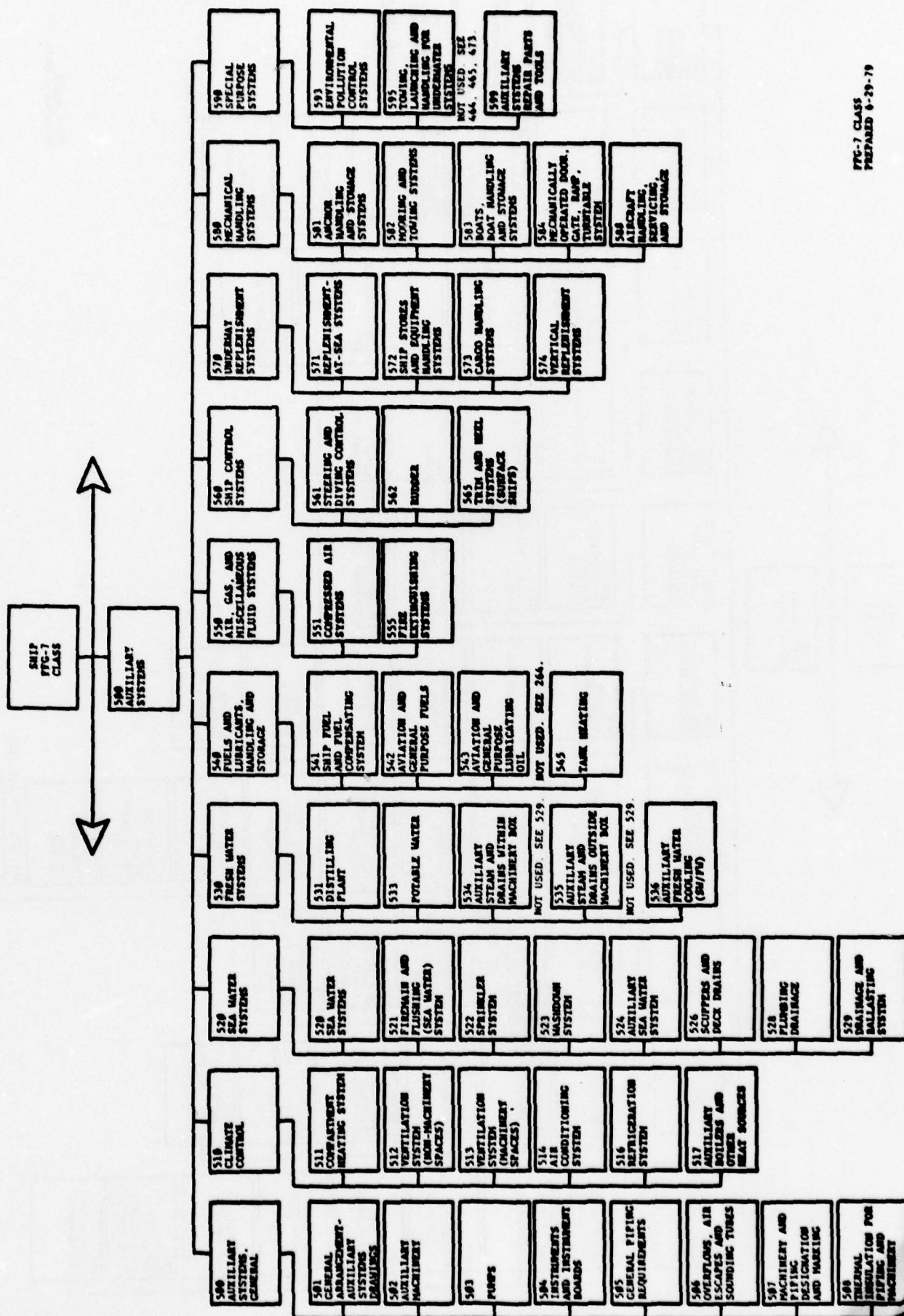
770-7 CLASS
PREPARED 3-1-79



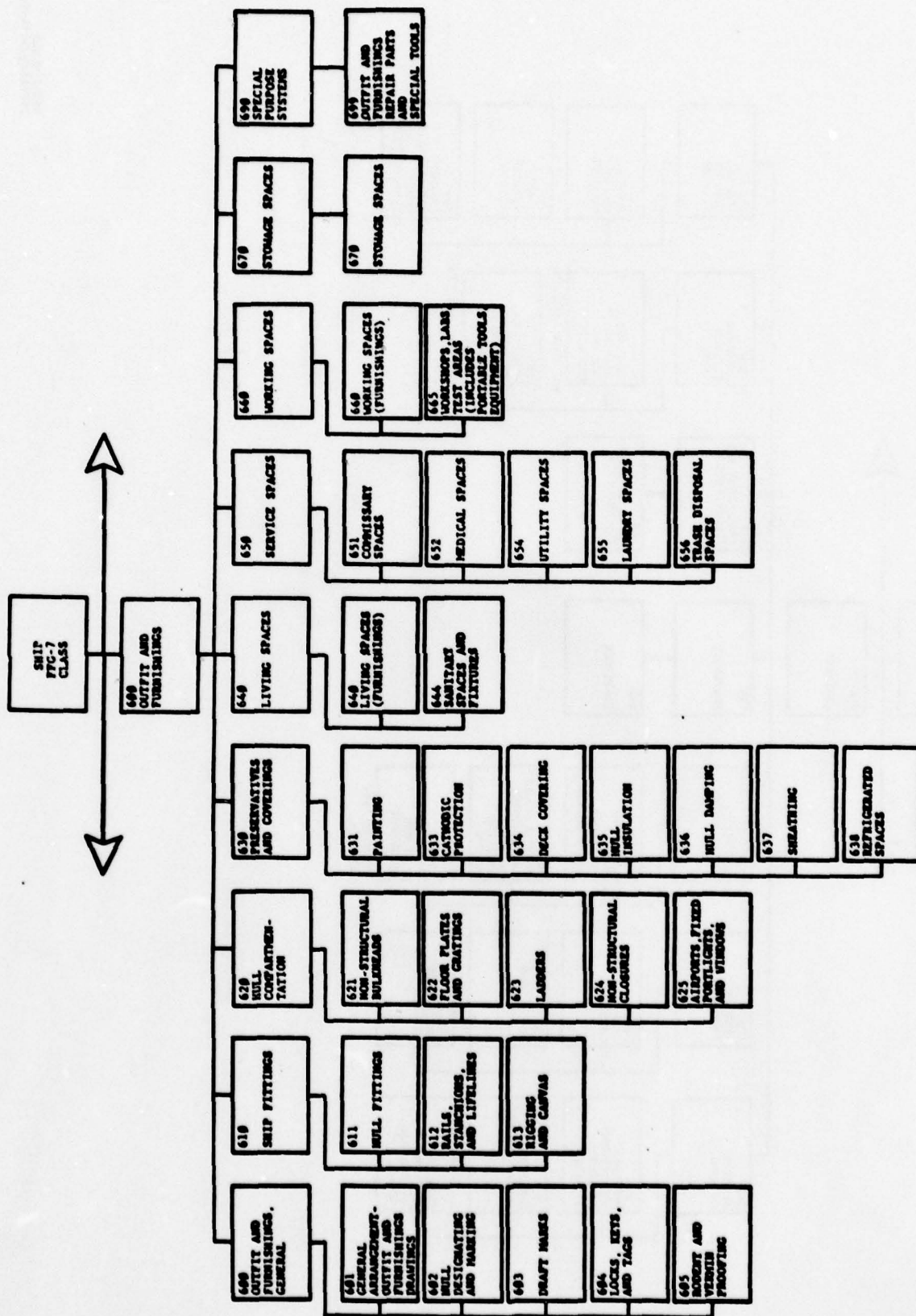




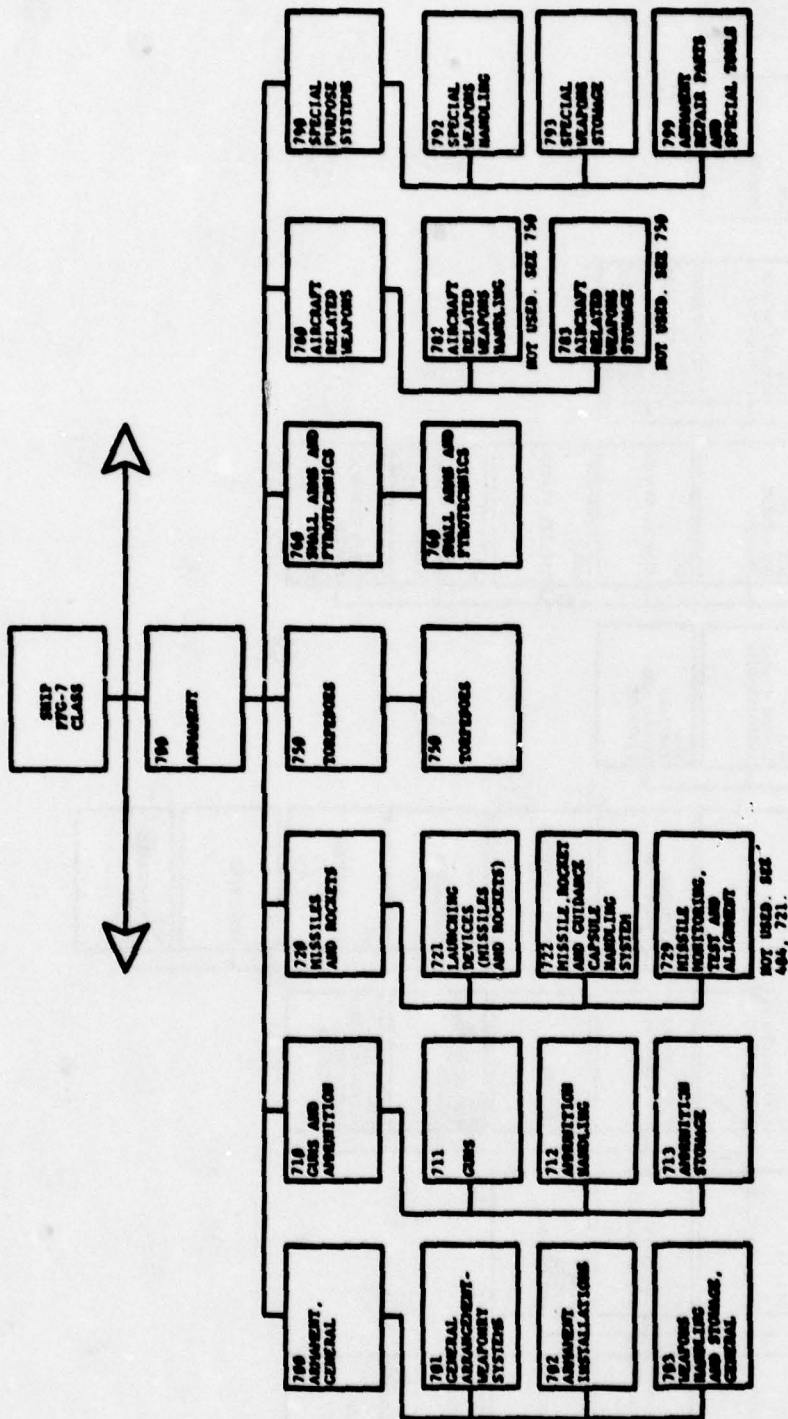
FFG-7 CLASS
PREPARED 4-10-79



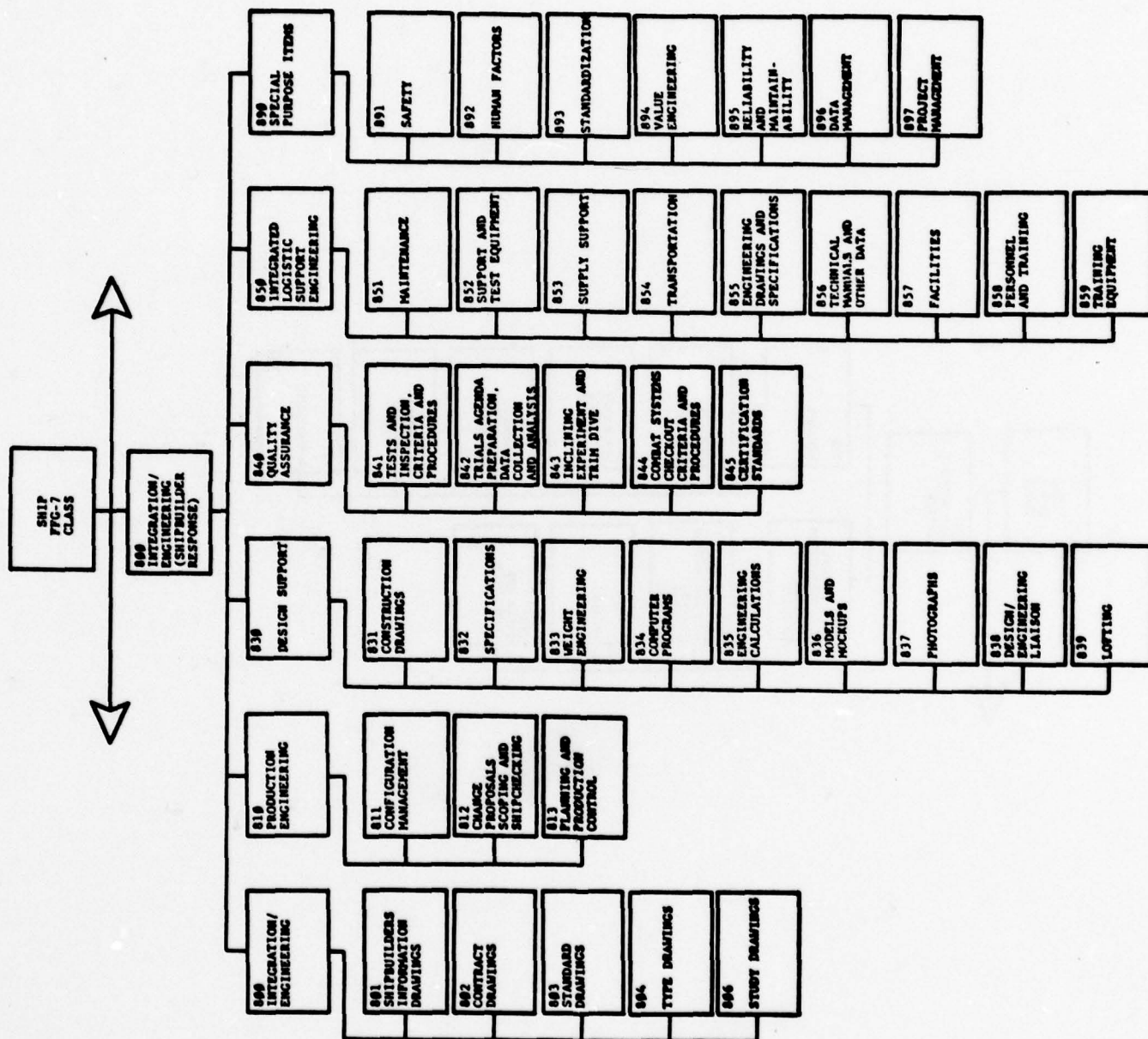
FFC-7 CLASS
PREPARED 8-29-79



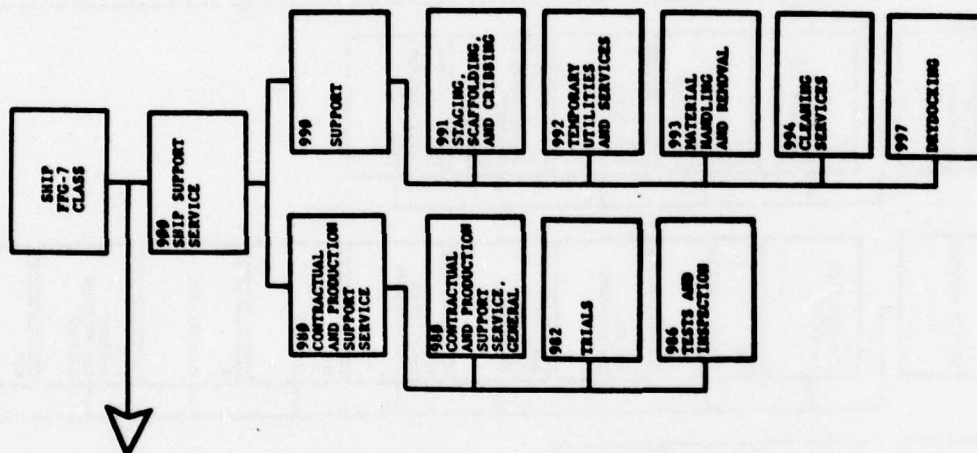
FFG-7 CLASS
PREPARED 4-10-79



581P CLASS
PREPARED 6-29-79



YFG-7 CLASS
PREPARED 3-1-79



FPC-7 CLASS
PREPARED 3-1-79

LEGEND OF SYMBOLS FOR LINE SCHEMATICS

	GENERATOR		HIGH PRESSURE ALARM		RELIEF VALVE
	AIR MOTOR		VACUUM PRESSURE GAUGE		SERVO RELIEF VALVE
	MOTOR, ELECTRIC		PRESSURE GAUGE		WATER REGULATING VALVE
	TRAIN MOTOR		TEMPERATURE GAUGE		PRESSURE REGULATING/ FLOW CONTROL VALVE
	EXTEND & RETRACT MOTOR		TEMPERATURE DETECTOR		UNLOADING VALVE
	HAND RATCHET		RESISTANCE TEMPERATURE DETECTOR		SEQUENCING VALVE
	FILTER		THERMOSTAT BULB		BALANCING VALVE
	DUPLEX FILTER		TEMPERATURE SWITCH		RECIRCULATING BYPASS VALVE
	DUPLEX STRAINER		FLOW SWITCH		SOLENOID VALVE
	FILTER SEPARATOR		PRESSURE SWITCH		ELECTRIC OPERATED SOLENOID VALVE
	DRYER		VENTURI		THREE WAY VALVE, SOLENOID OPERATED
	HEATER		REDUCER		ELECTRIC MOTOR OPERATED VALVE
	GAS TURBINE		ORIFICE		ELECTRIC MOTOR OPERATED BUTTERFLY VALVE
	READY SERVICE RING		ORIFICE WITH HOSE CONNECTION		BUTTERFLY VALVE
	CONTROL WHEEL		HOSE CONNECTION		MANUAL OPERATED BUTTERFLY VALVE
	RUDDER ANGLE RECEIVER		FLEX HOSE CONNECTION		PRESSURE REDUCING BUTTERFLY VALVE
	RUDDER ANGLE TRANSMITTER		STOP LINE VALVE		SOLENOID PILOT OPERATED FLOW CONTROL BUTTERFLY VALVE
	CIRCUIT BREAKER		STOP VALVE		TEMPERATURE REGULATING VALVE
	SHED BREAKER		LOCKED SHUT VALVE		THERMOSTATIC EXPANSION VALVE
	SALINITY CELL		SAMPLING VALVE		PRIORITY VALVE
	KING SOLENOID		NEEDLE VALVE		GLOBE STOP CHECK VALVE
	PRESSURE TRANSDUCER		GLOBE VALVE		STOP CHECK VALVE
	DIFFERENTIAL PRESSURE TRANSDUCER		QUICK CLOSING VALVE		LINE CHECK VALVE
			GATE VALVE		SWING CHECK VALVE
			GATE VALVE DECK OPERATED REMOTE OPERATED VALVE		PUMP

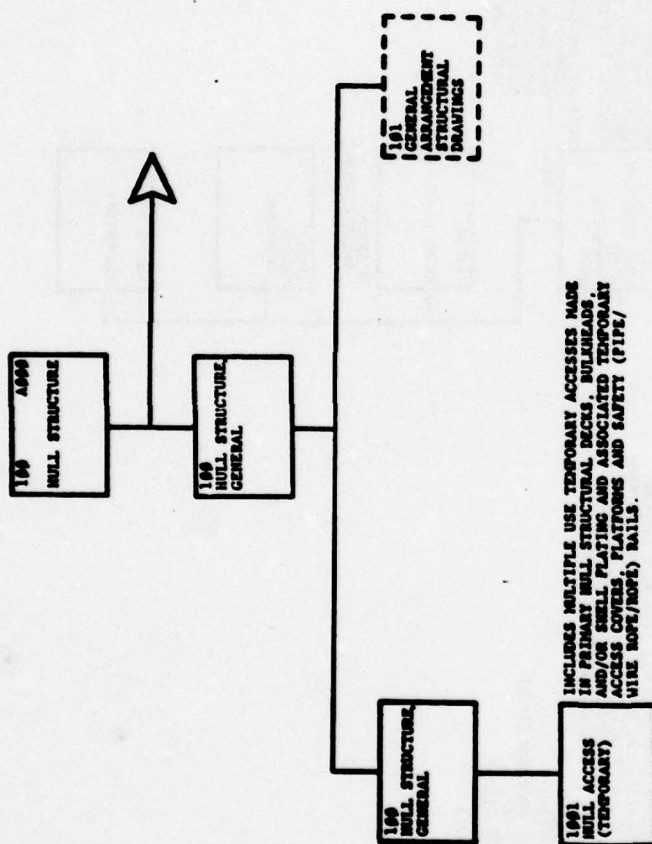
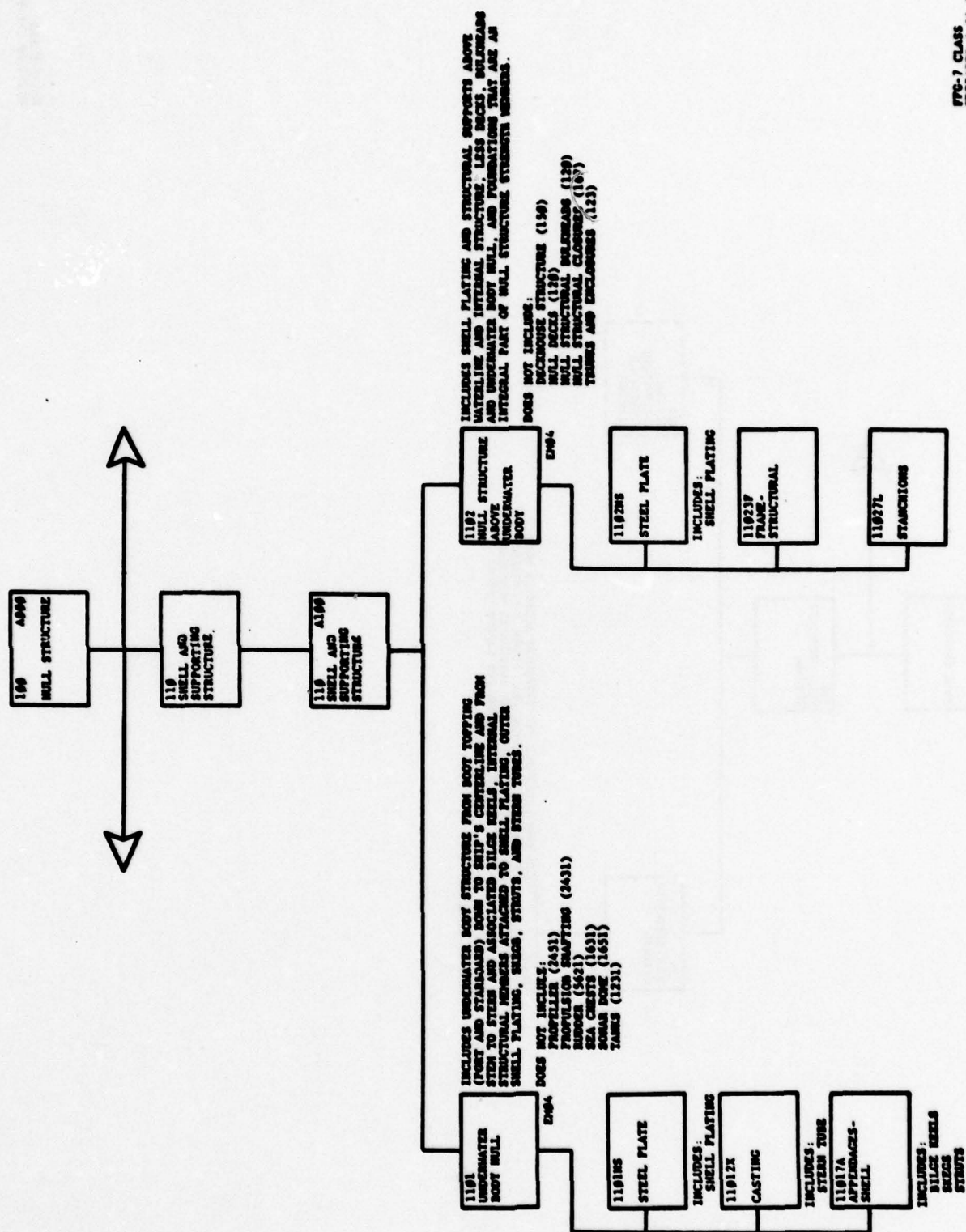
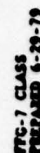
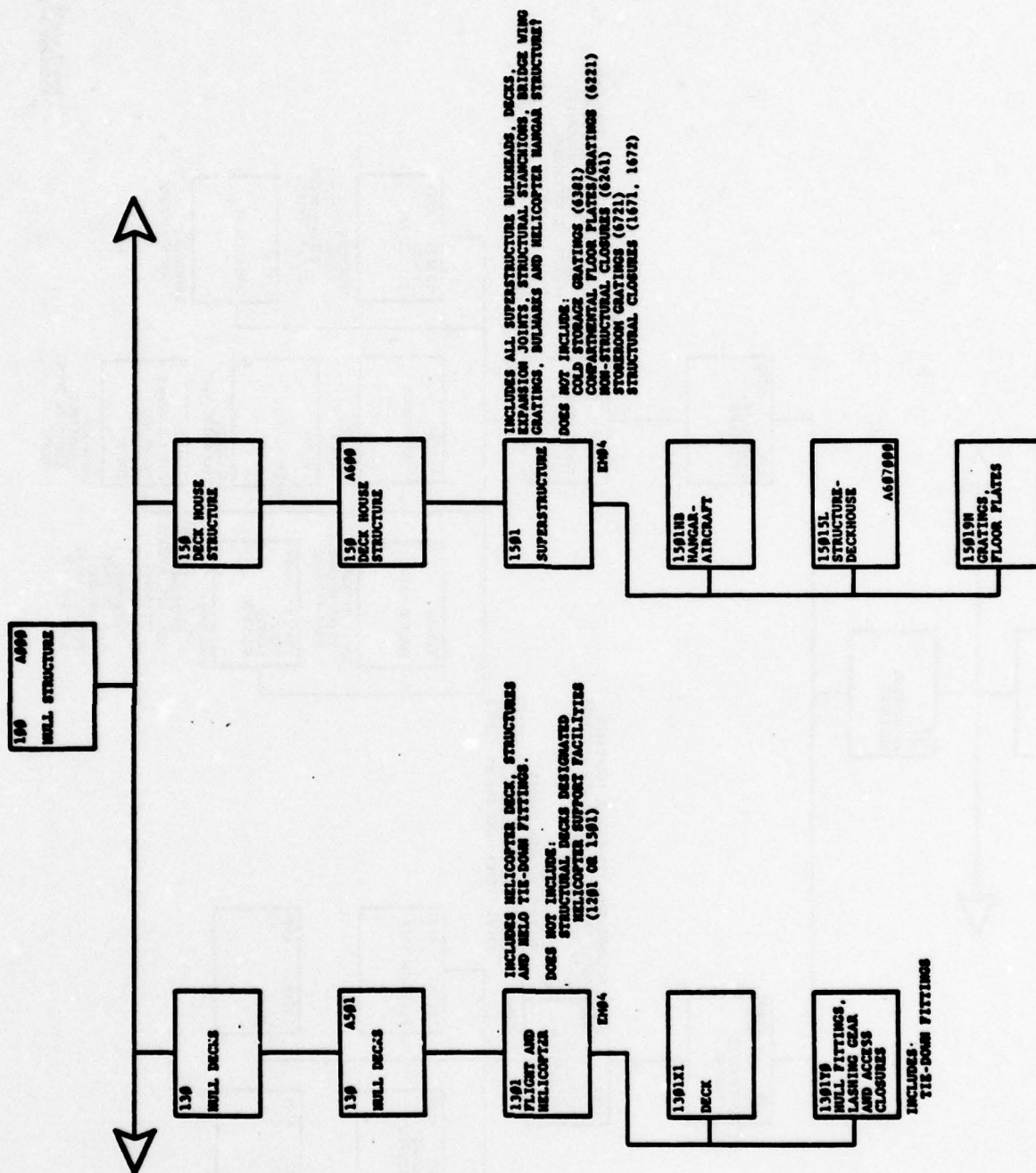
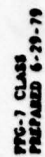


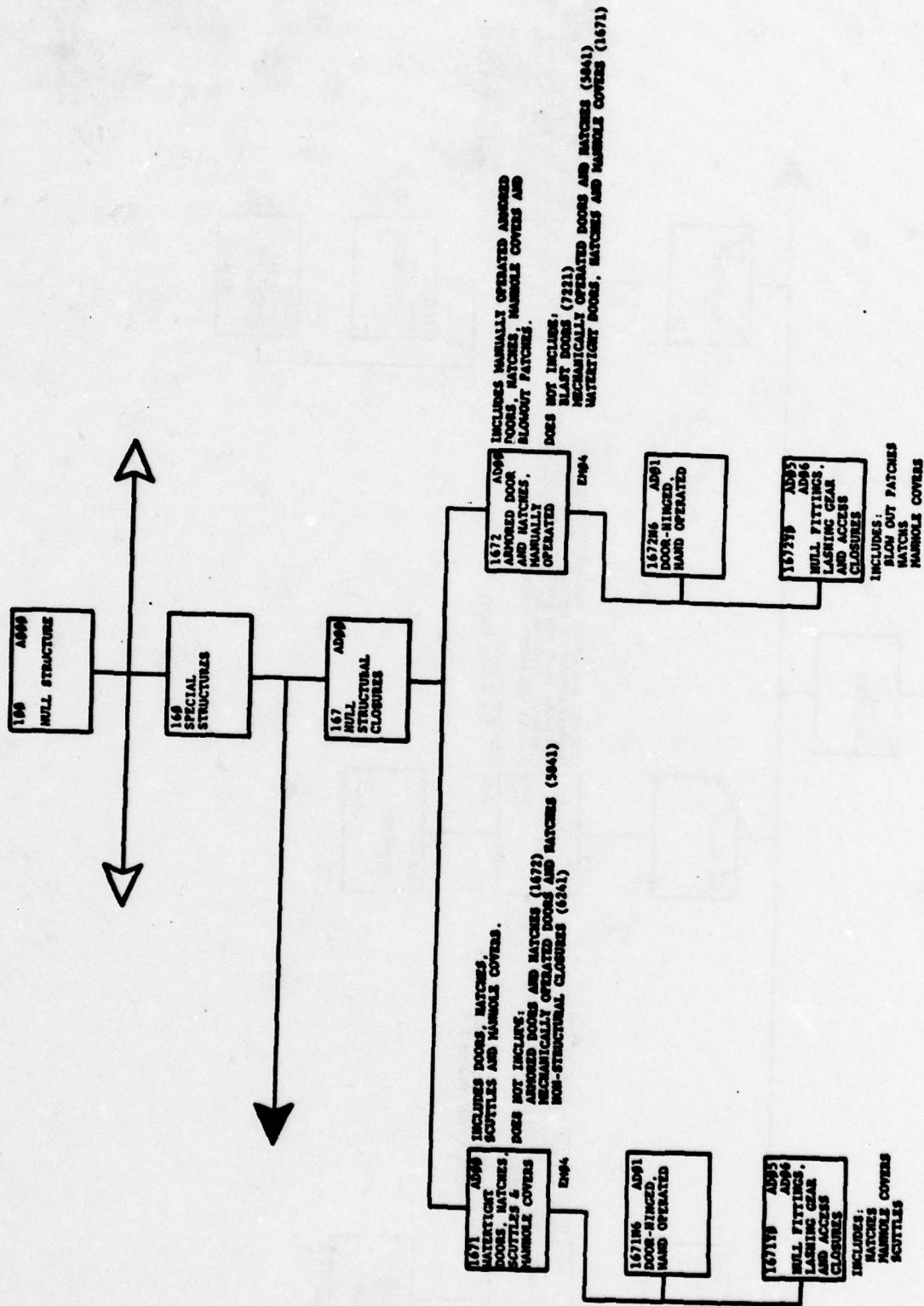
FIG-7 CLASS
PREPARED 3-1-79











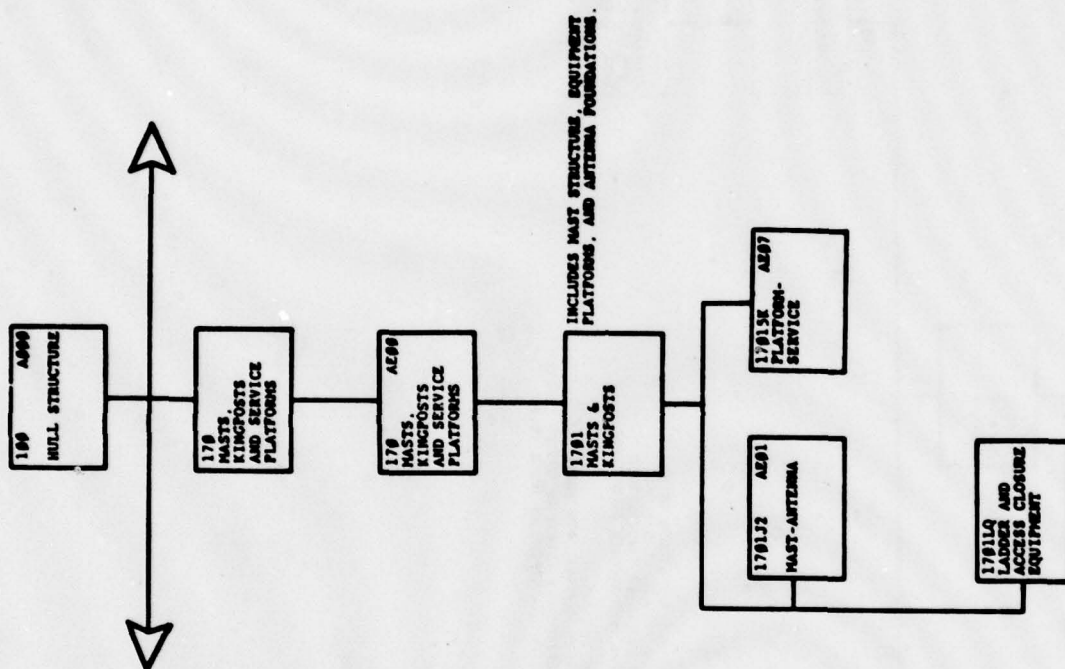


FIG-1 CLASS
PREPARED 6-29-79

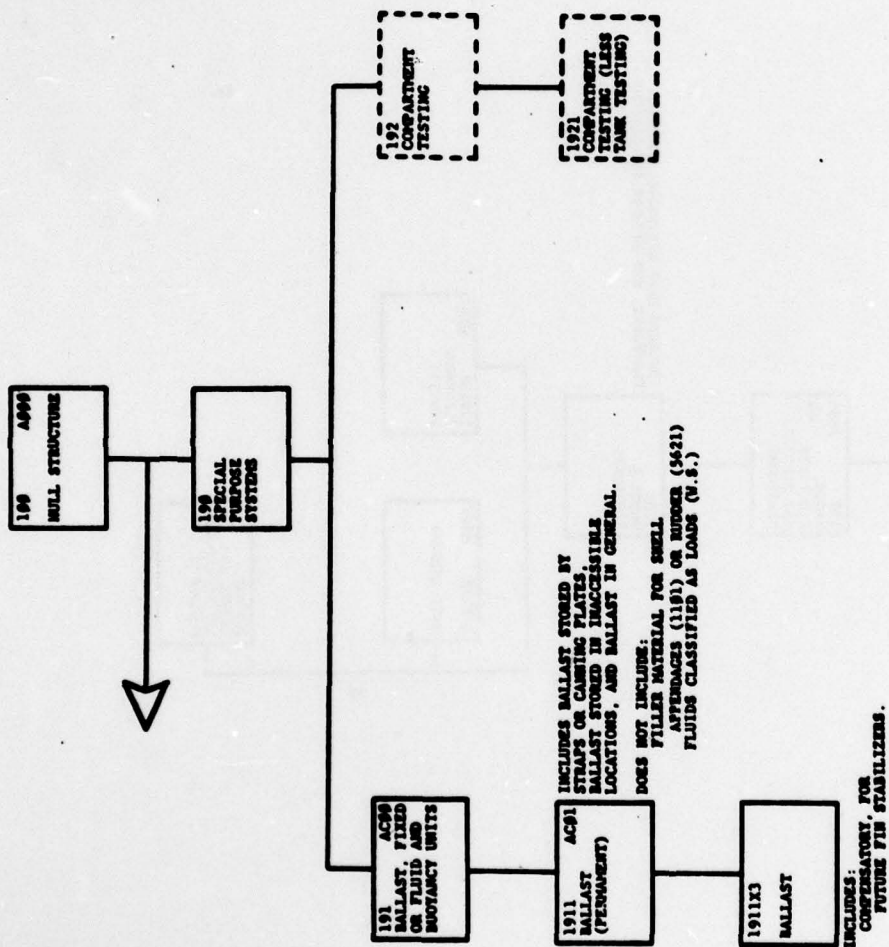


FIG-7 CLASS
PREPARED 6-29-79

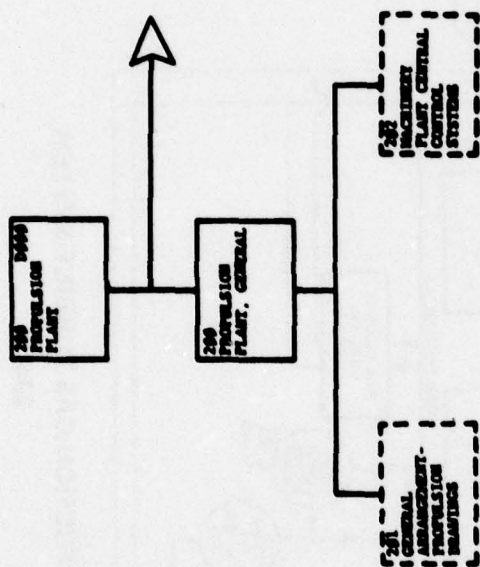
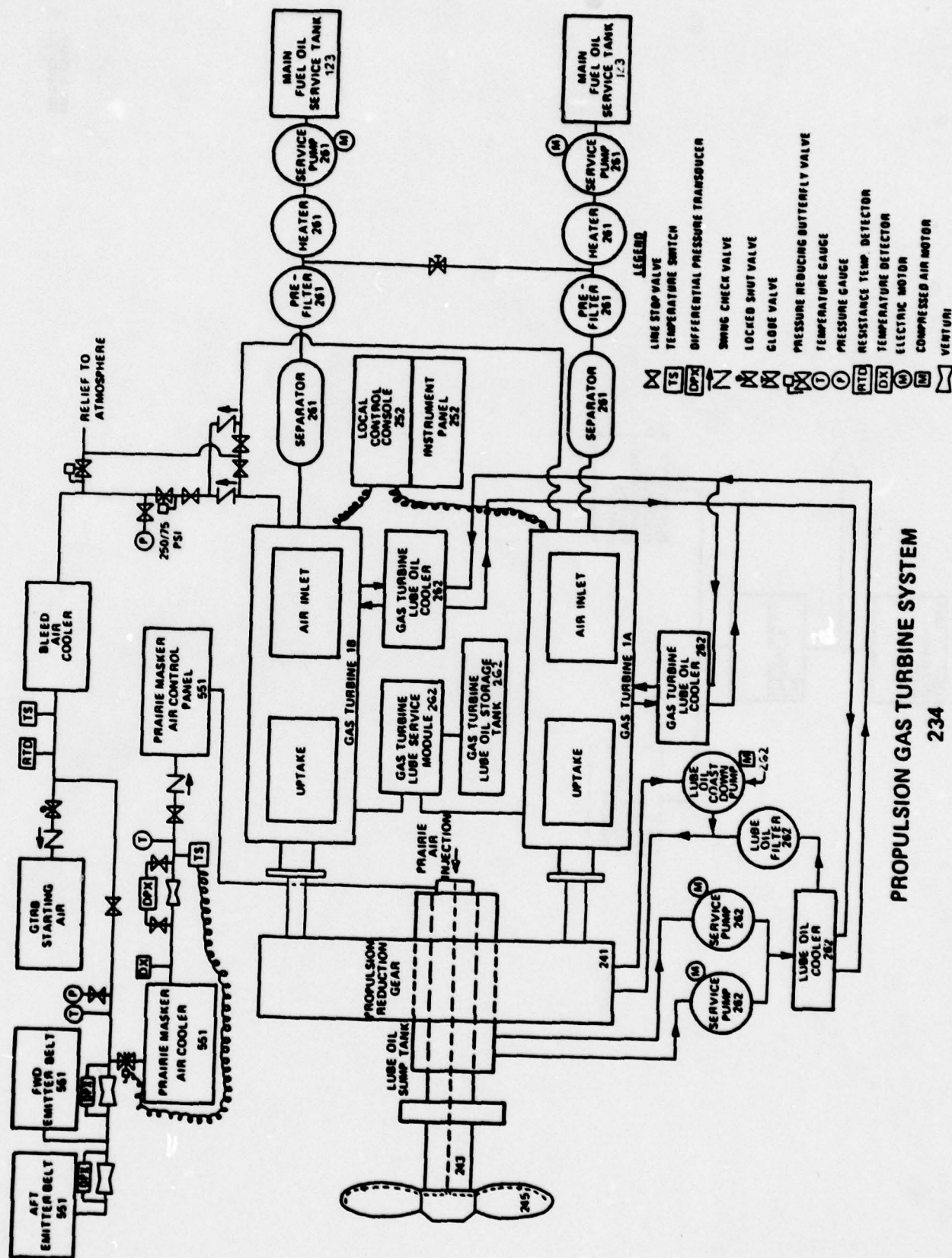
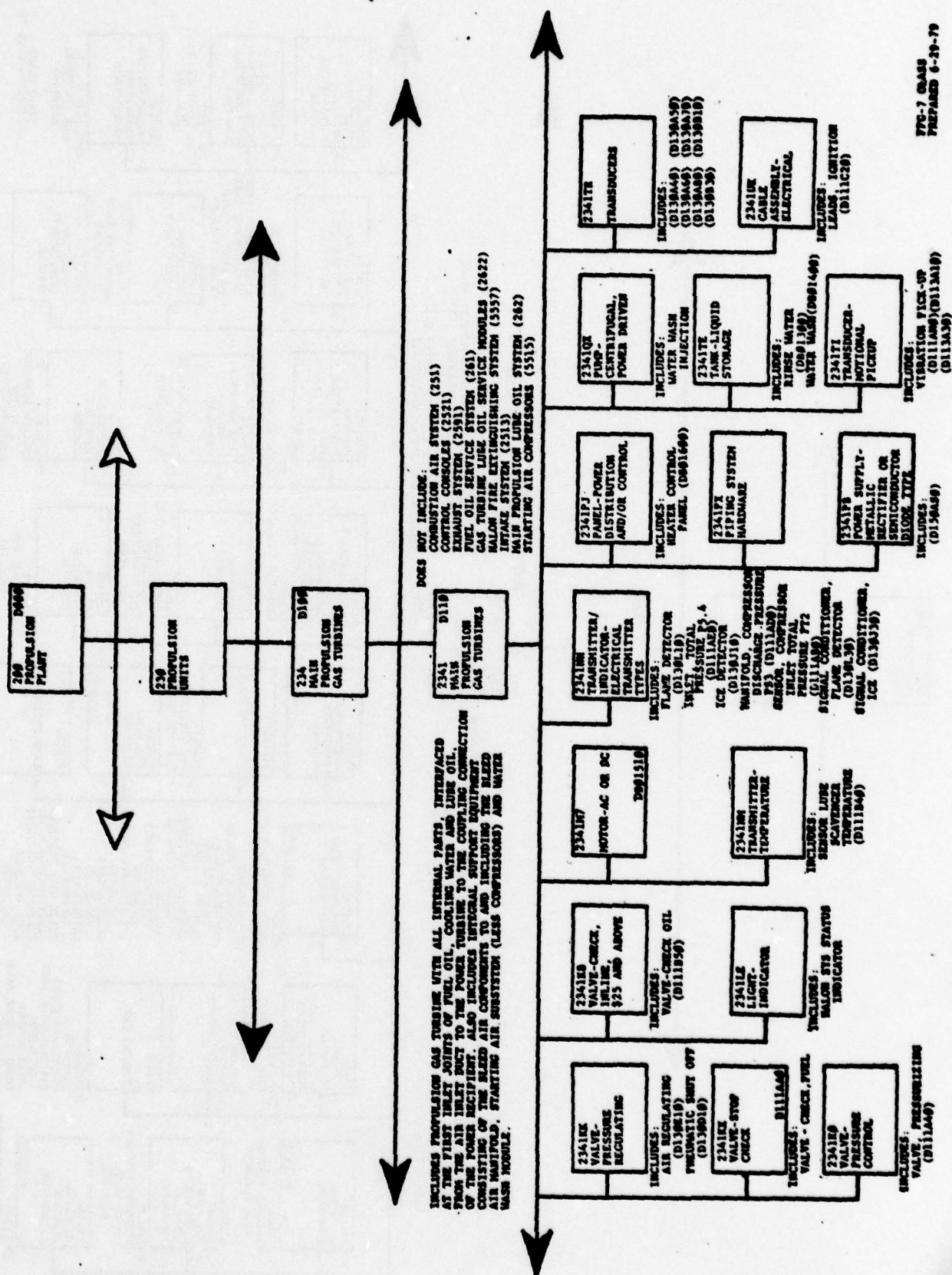
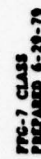
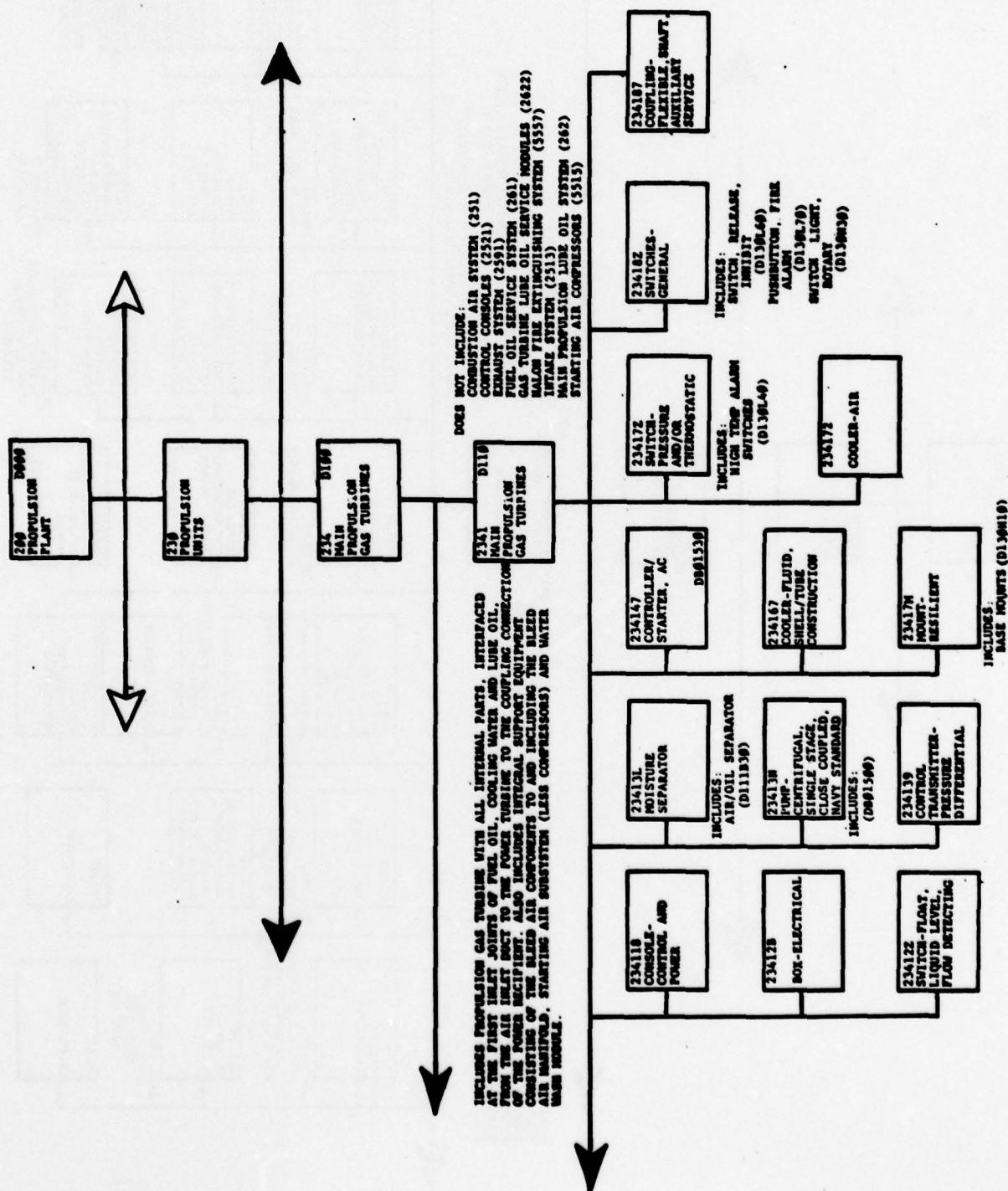


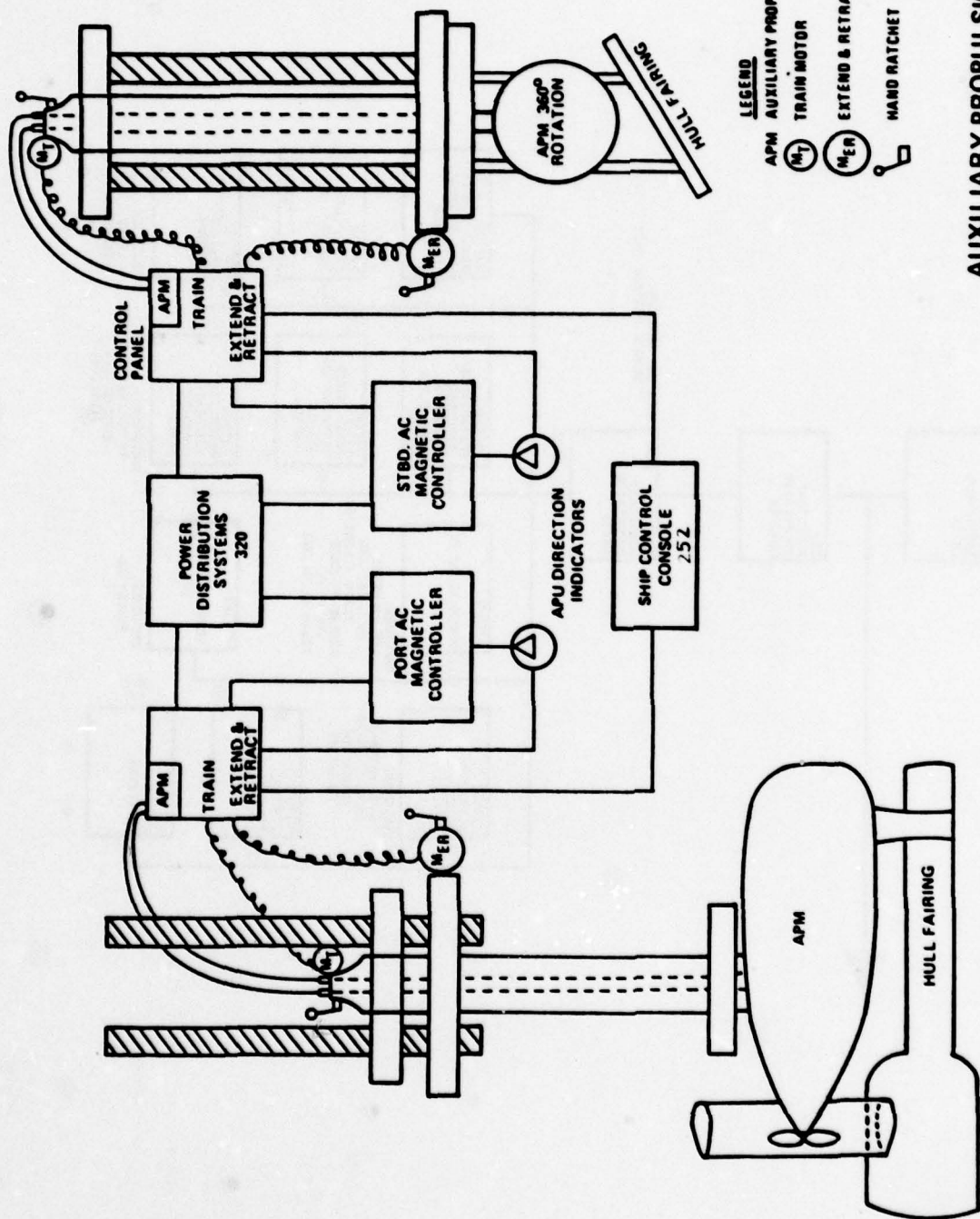
FIG-7 CLASS
PREPARED 3-1-79











NOTE: EXTENDED & ROTATED 90°

AUXILIARY PROPULSION DEVICES
237

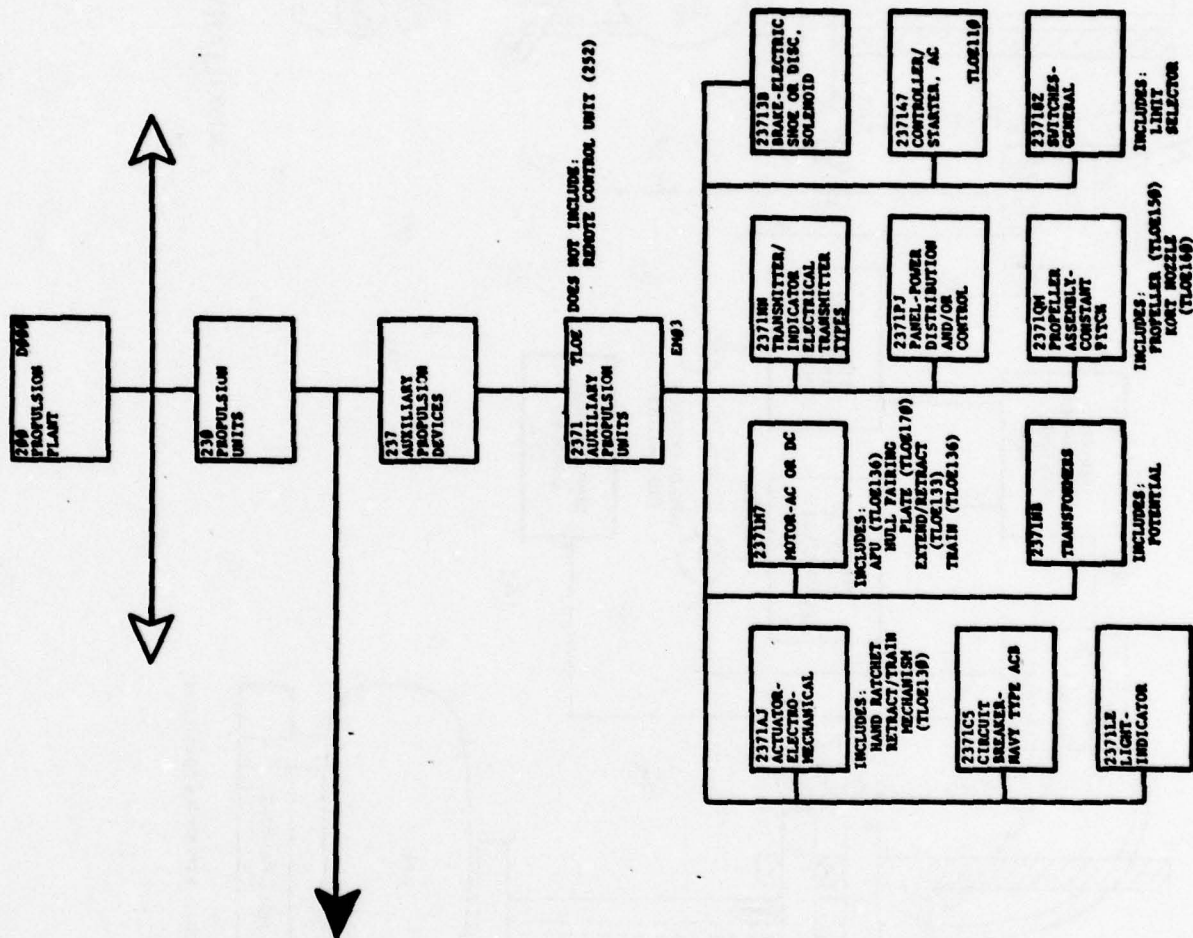
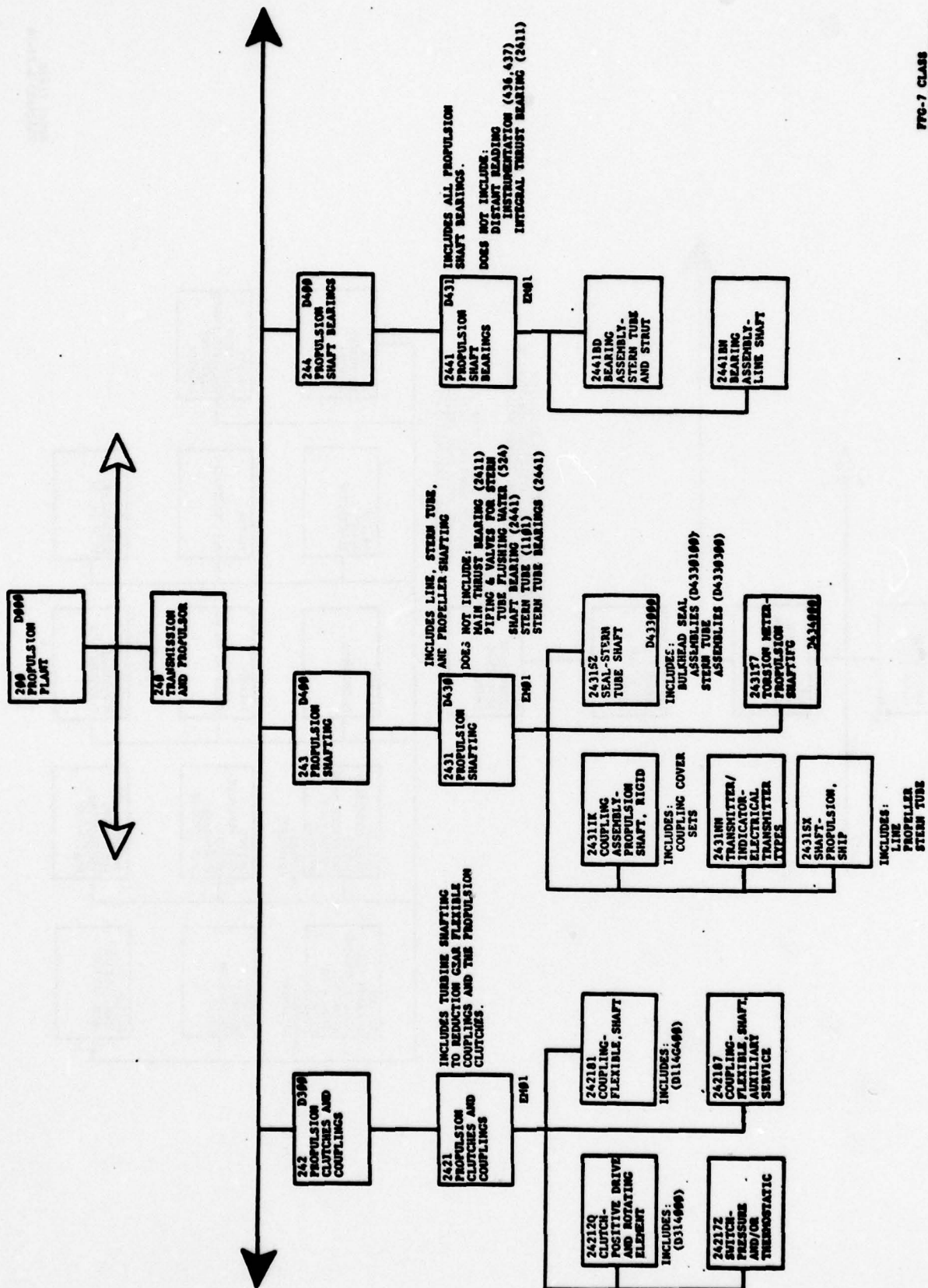
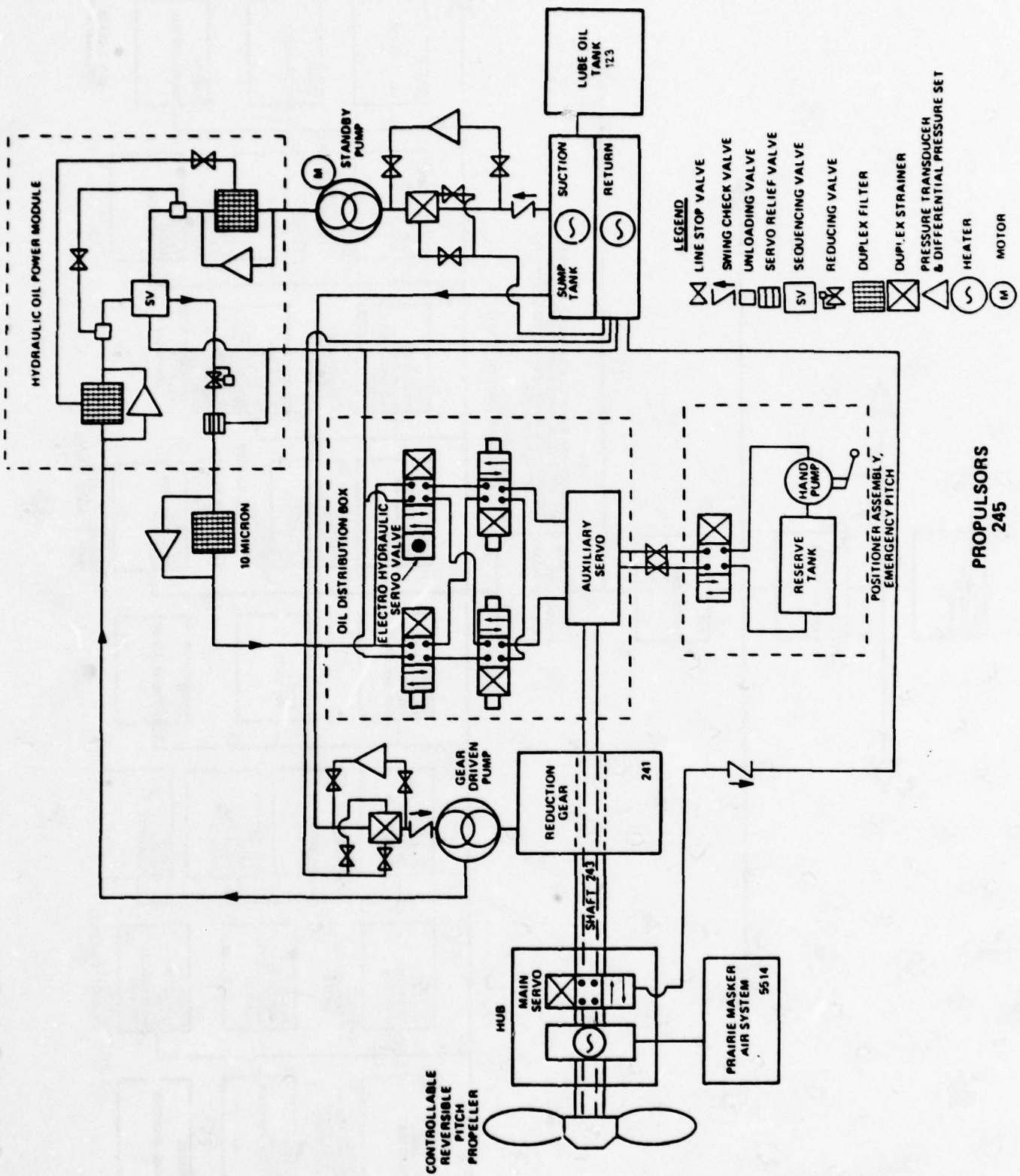


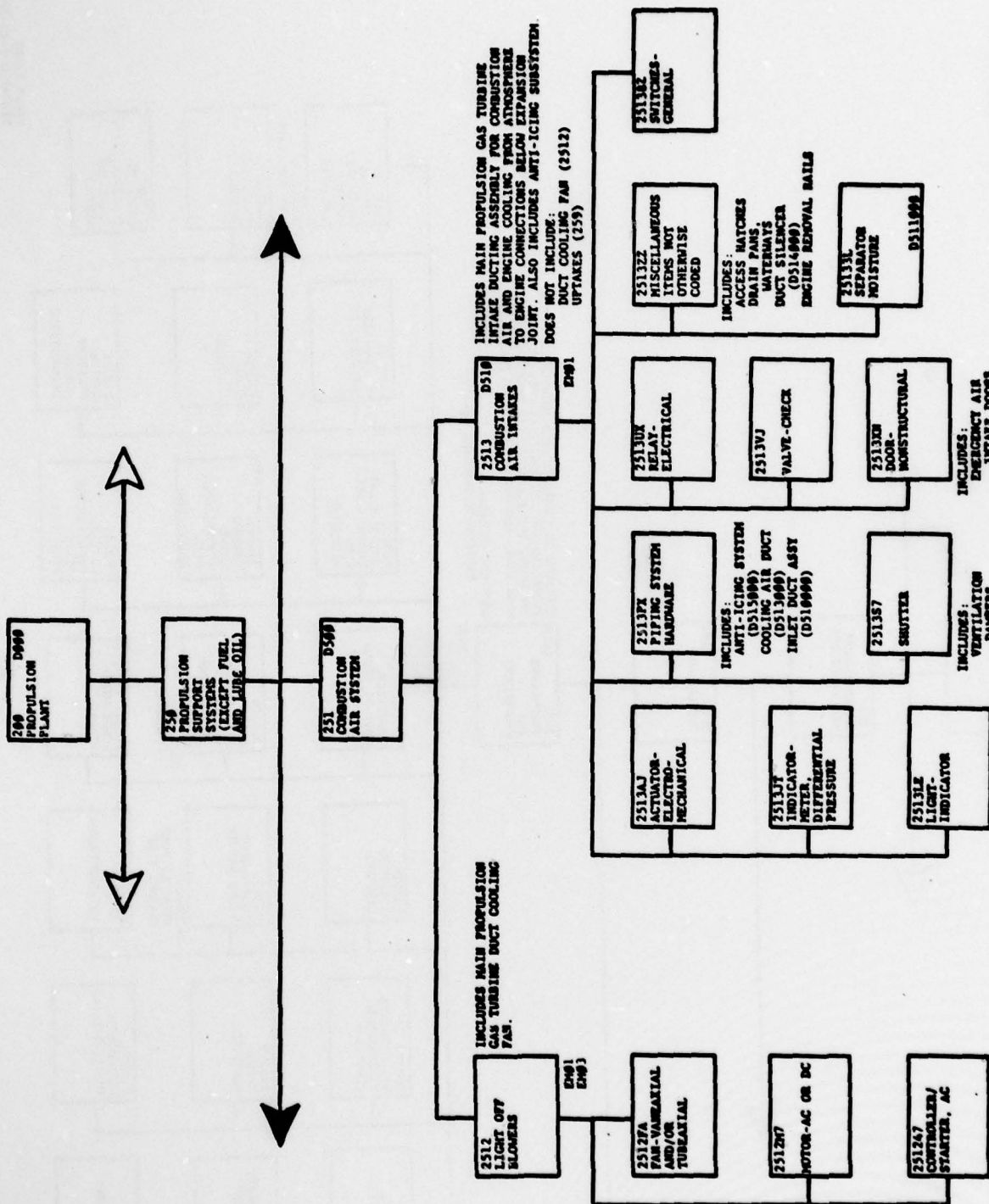
FIG-7 CLASS
PREPARED 6-19-79



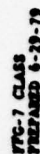


PROPULSORS
245

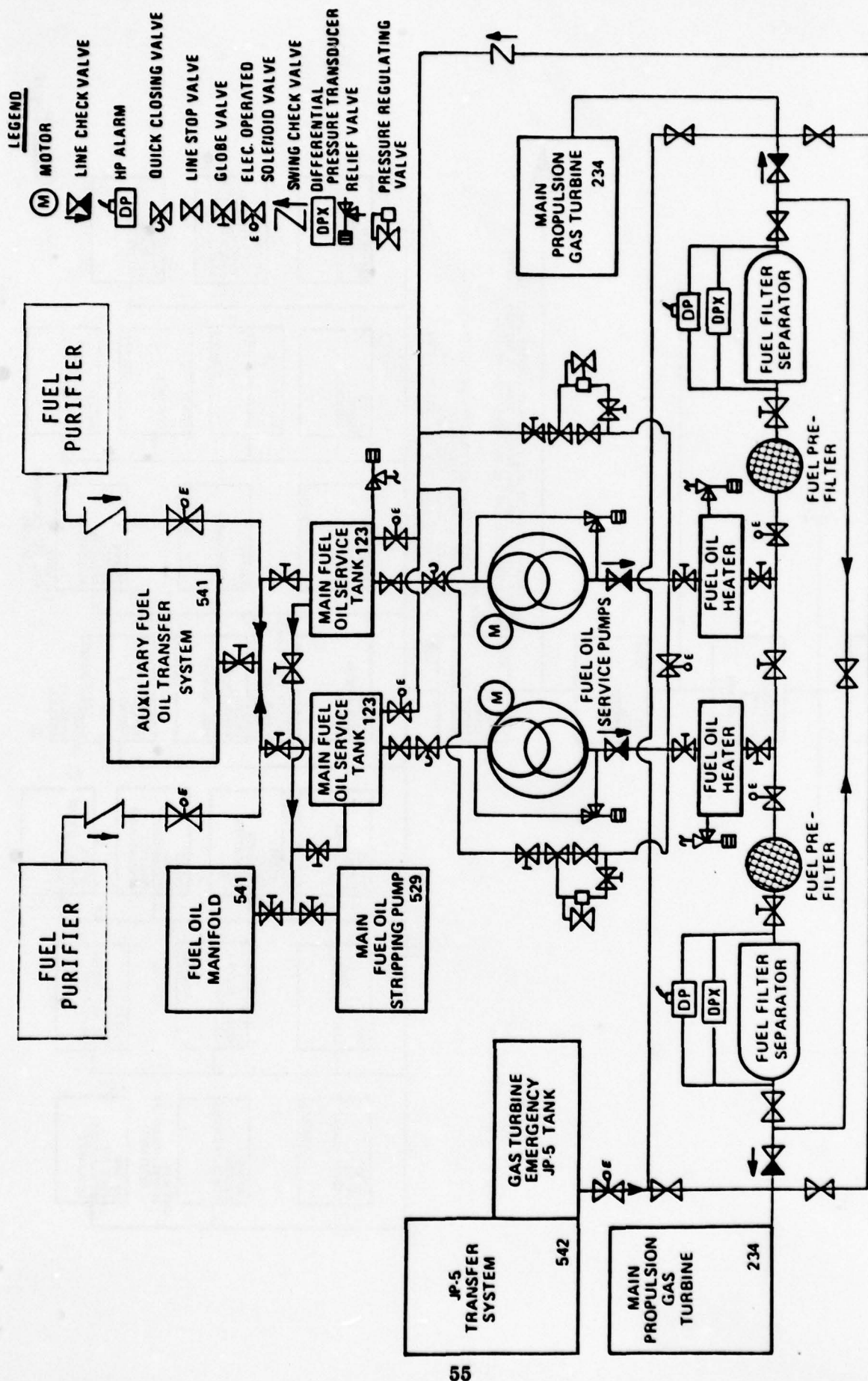




PPG-7 CLASS
 PREPARED 6-20-79







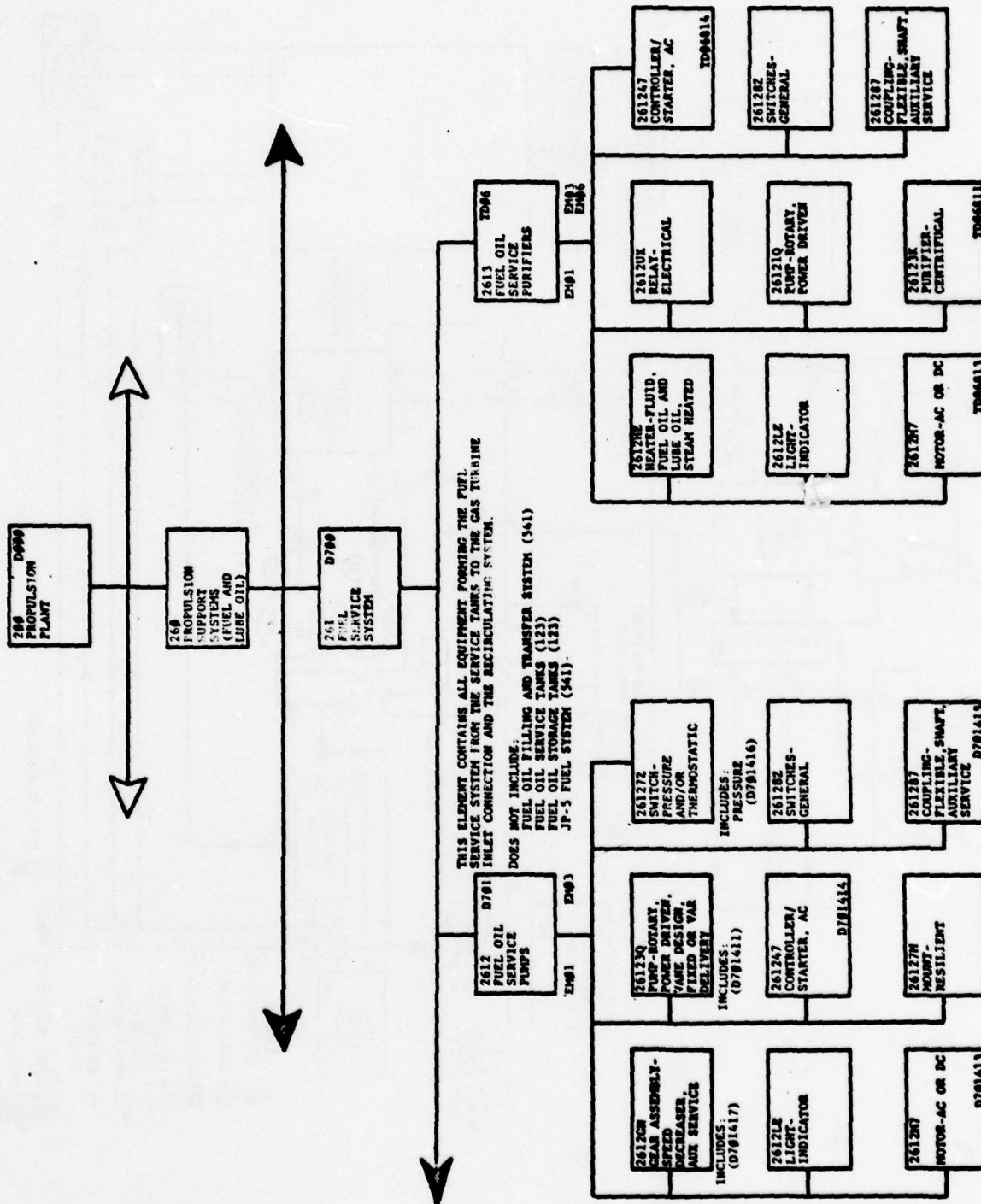
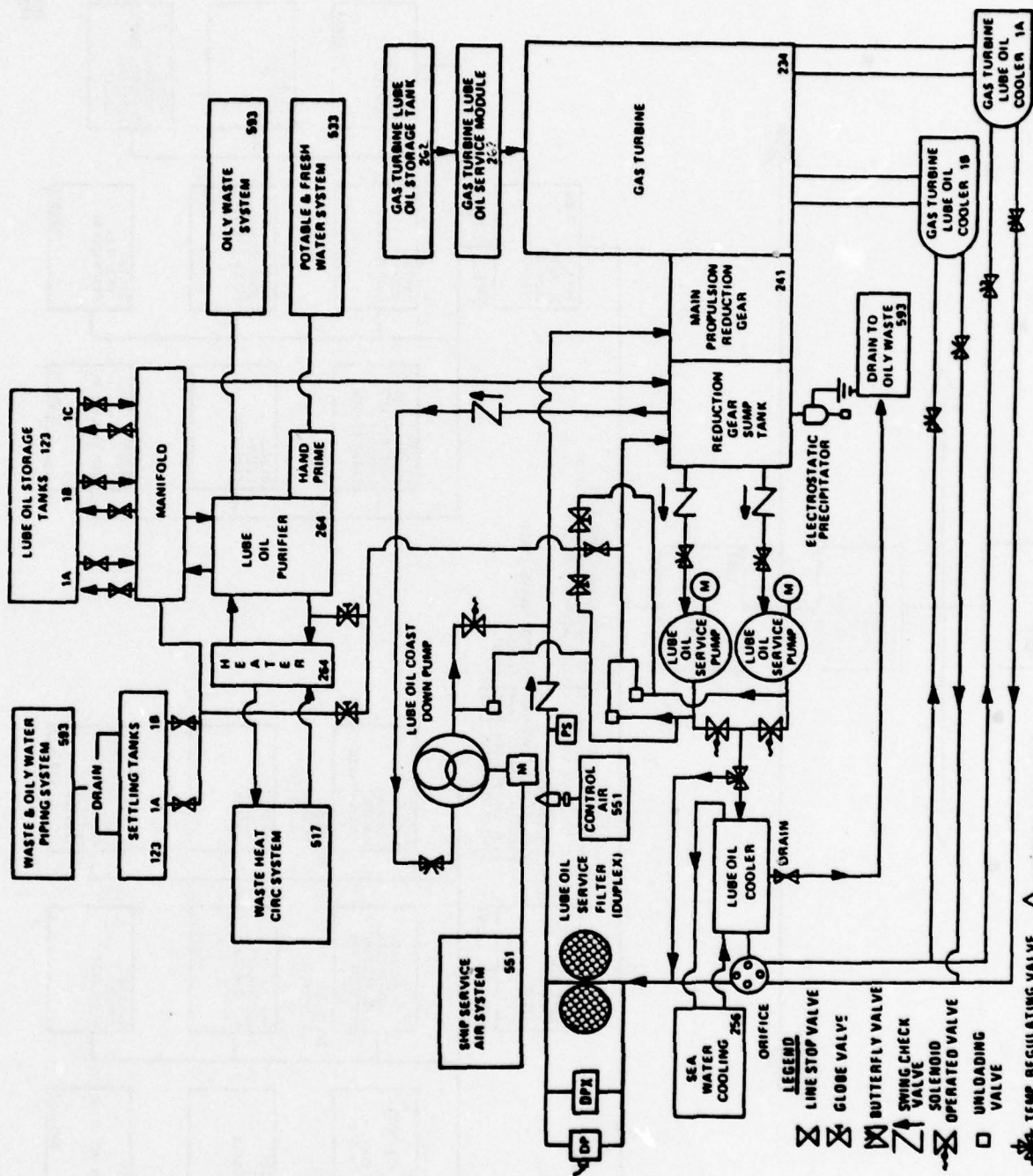


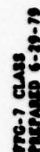
FIG-7 CLASS
PREPARED 6-28-79

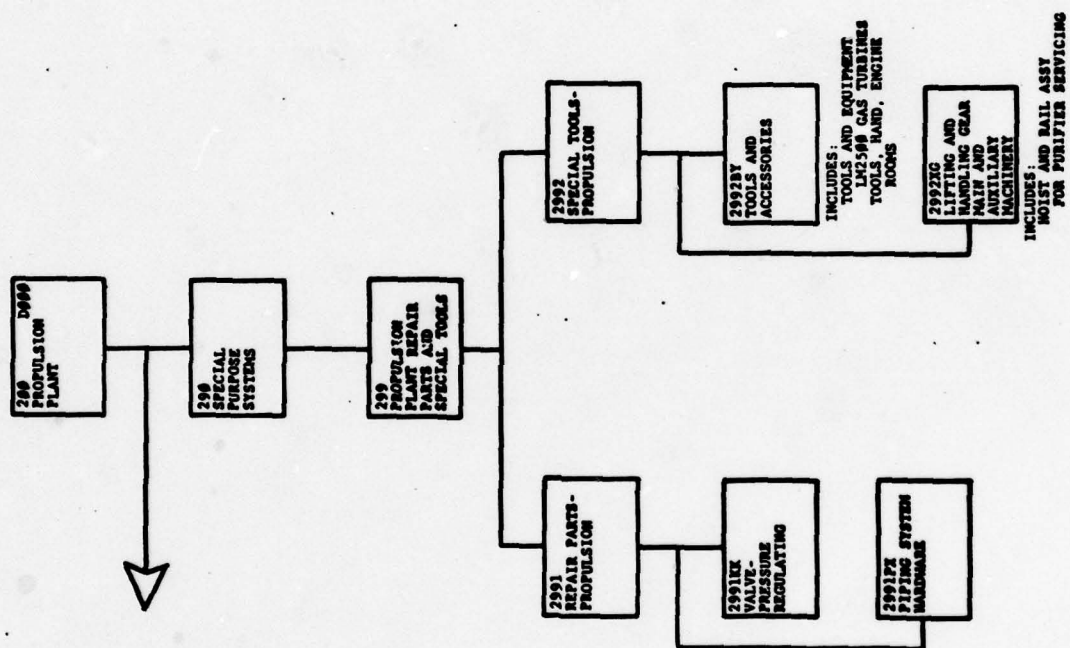


MAIN PROPULSION LUBE OIL SYSTEM

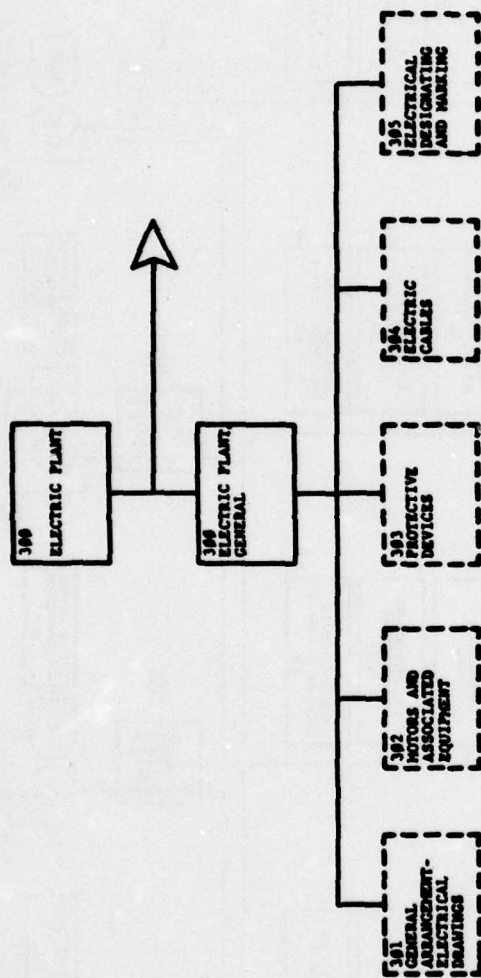
262

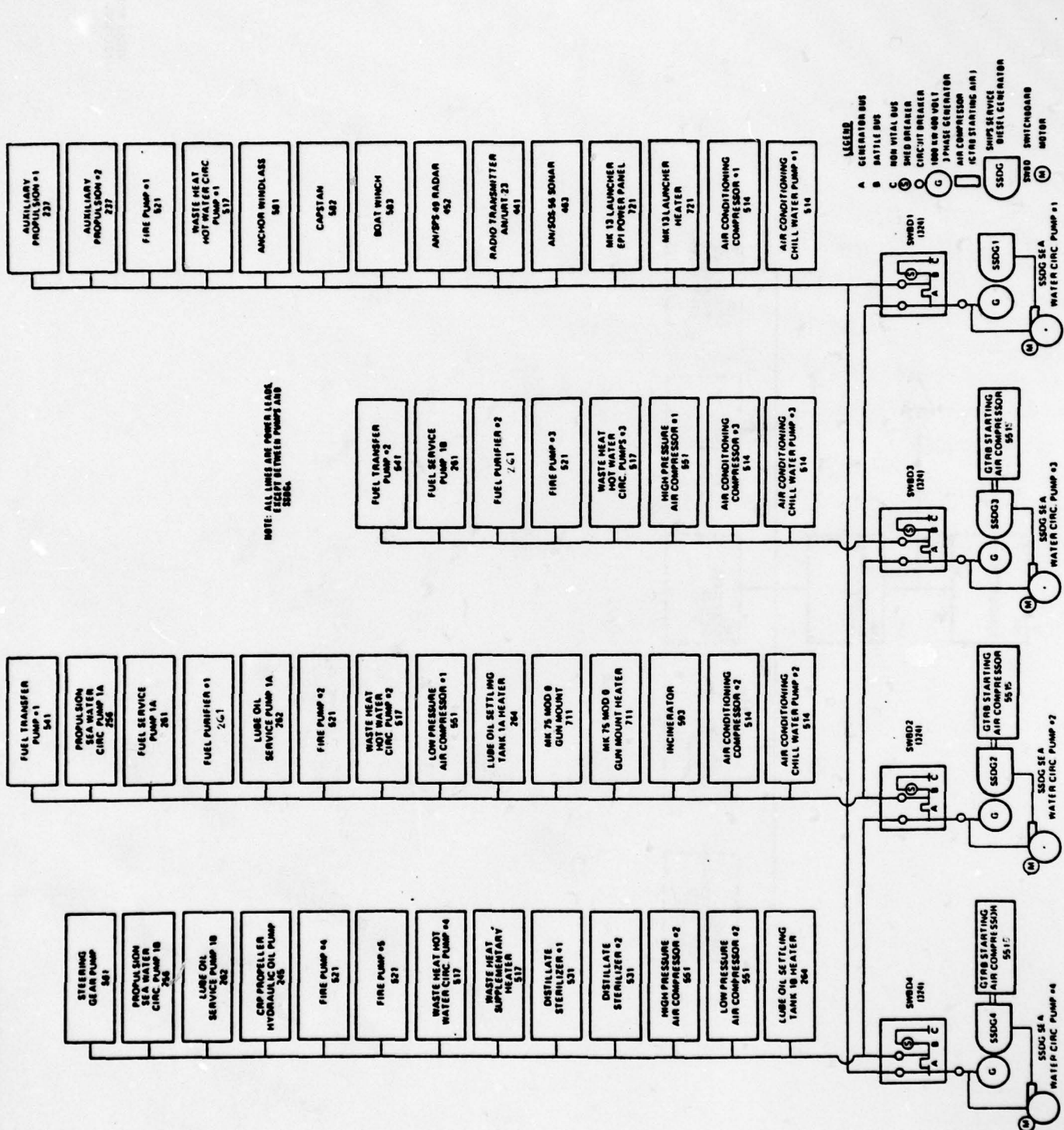


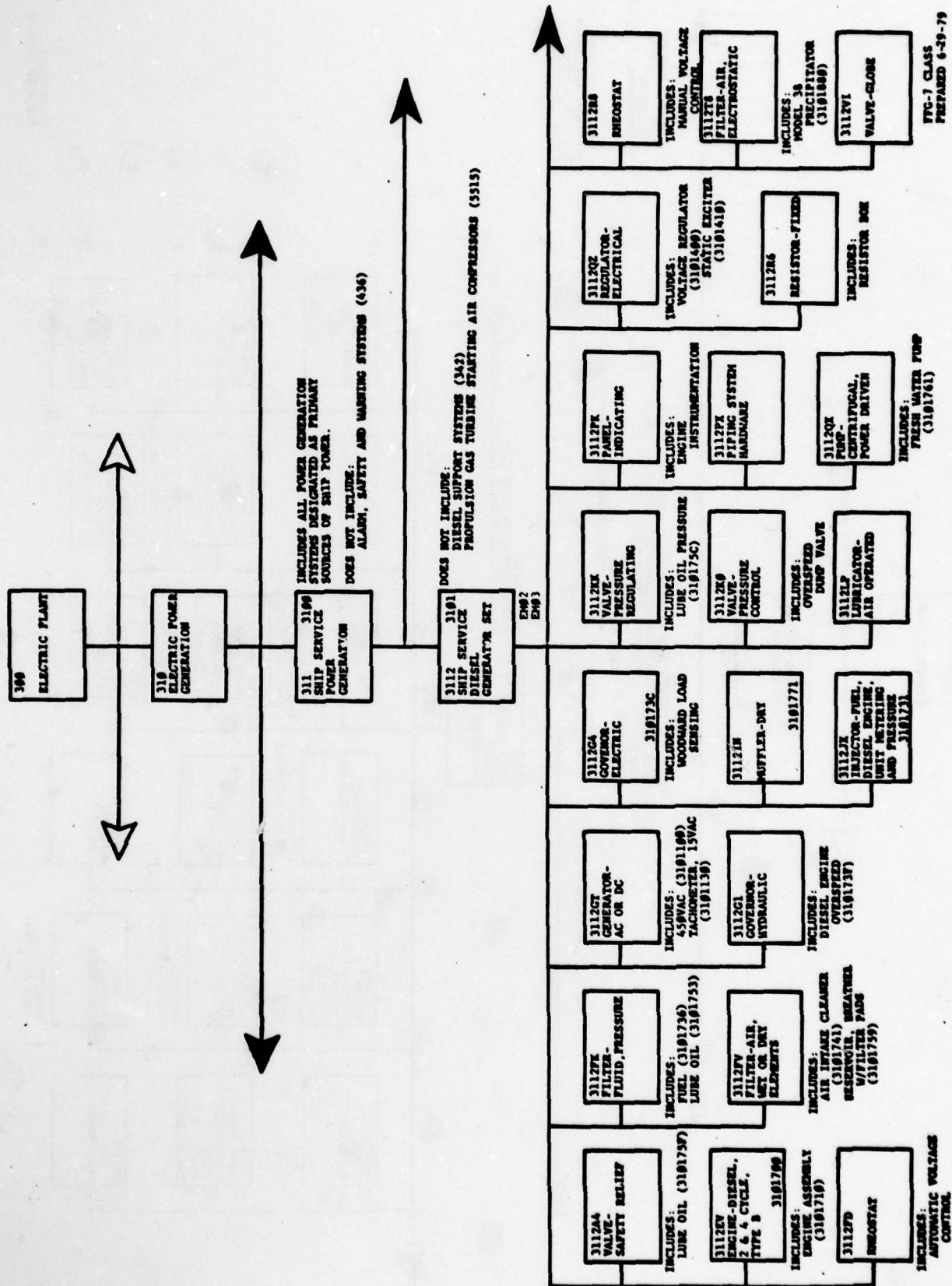




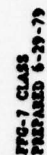
FFG-7 CLASS
PREPARED 6-19-79

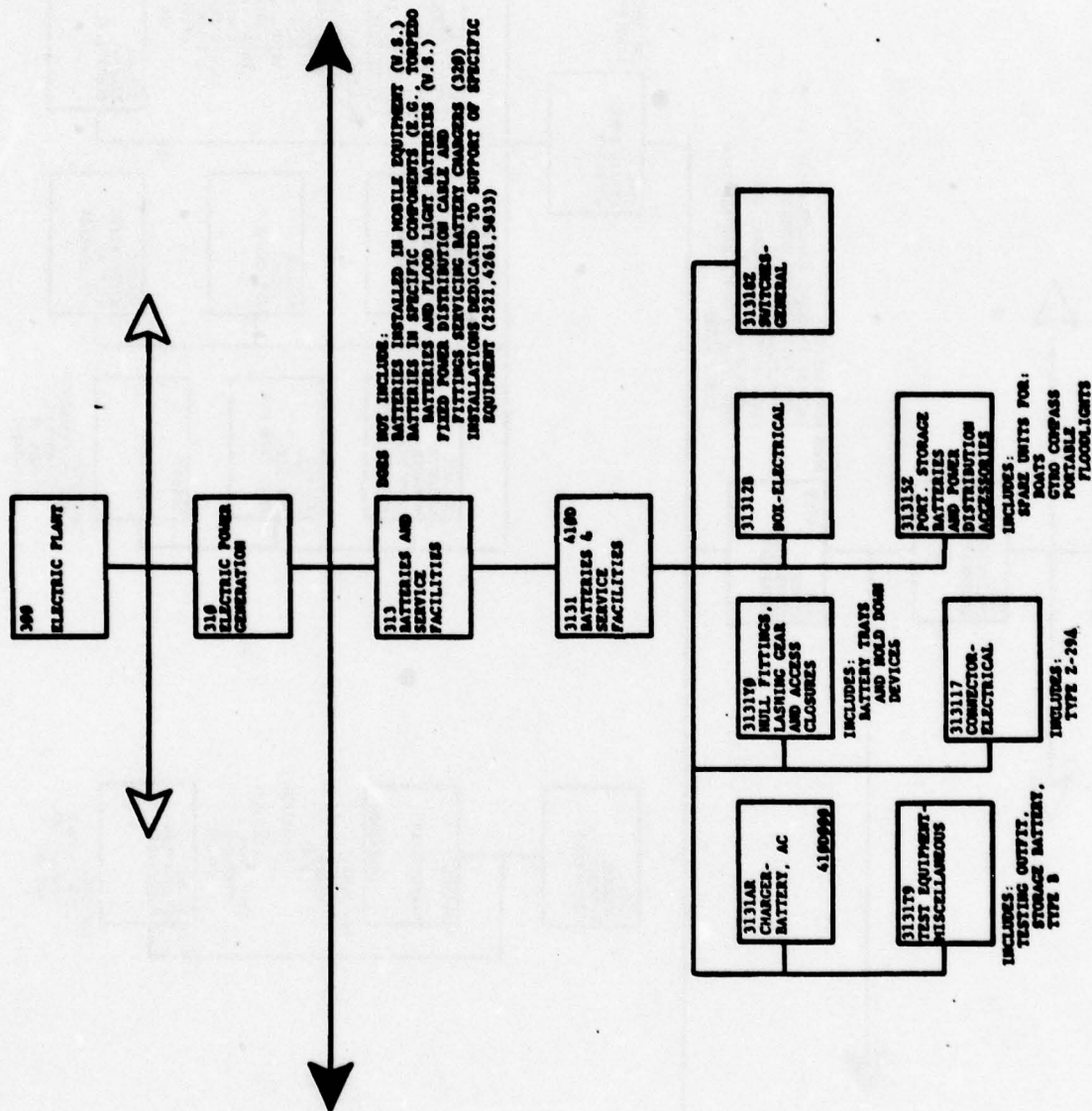




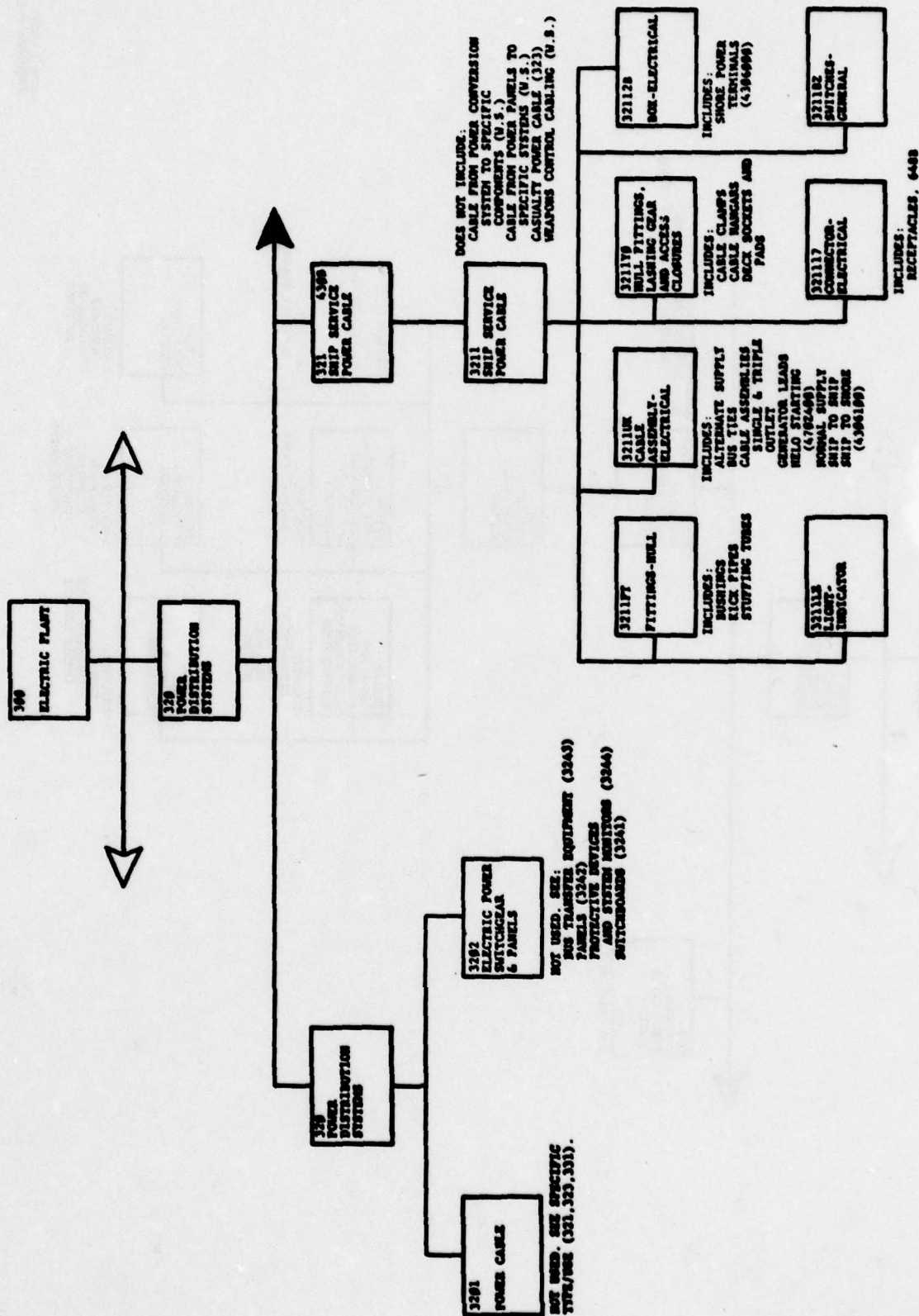


FTC-7 CLASS
 PREPARED 6-29-79









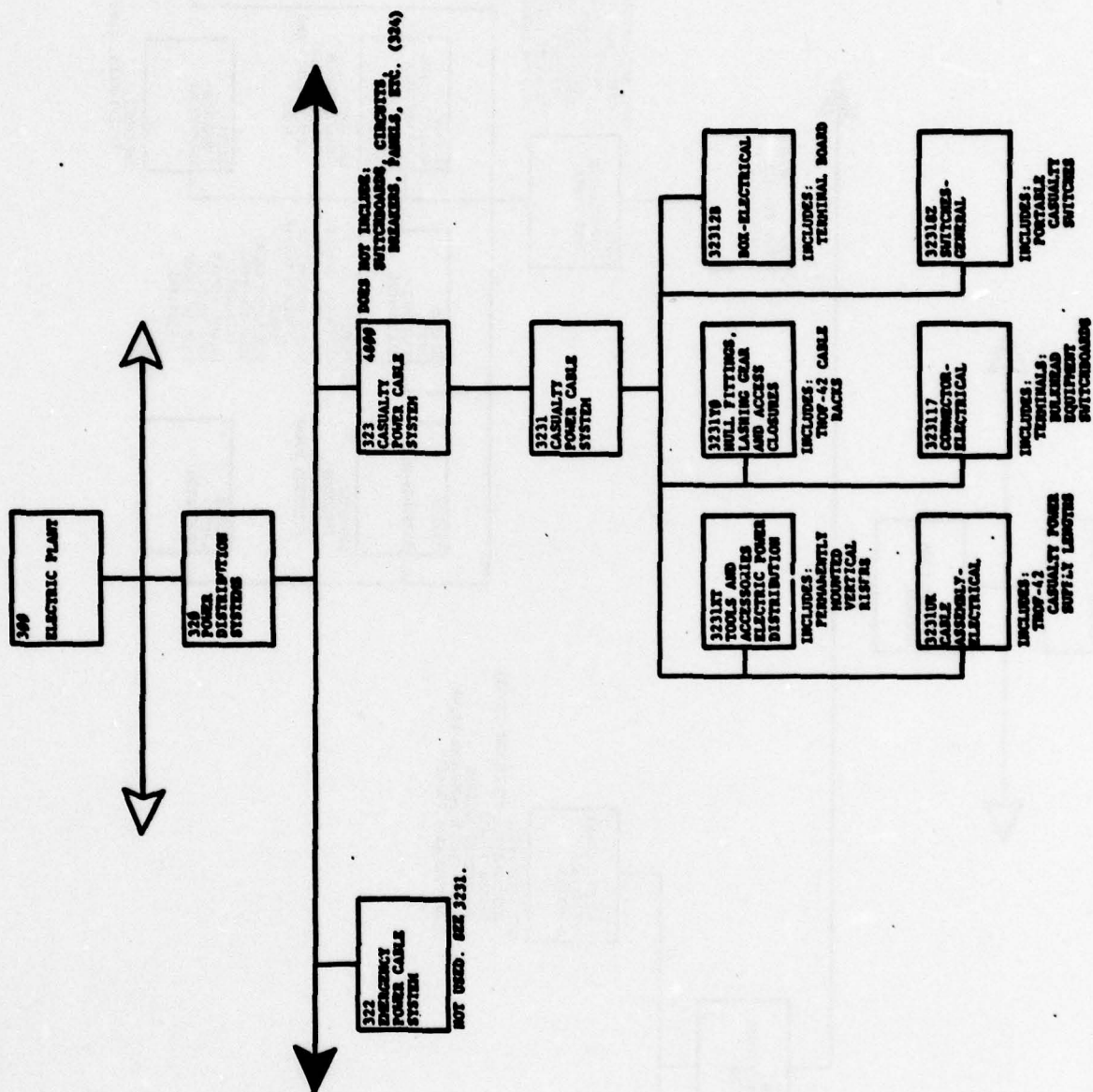
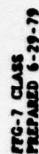
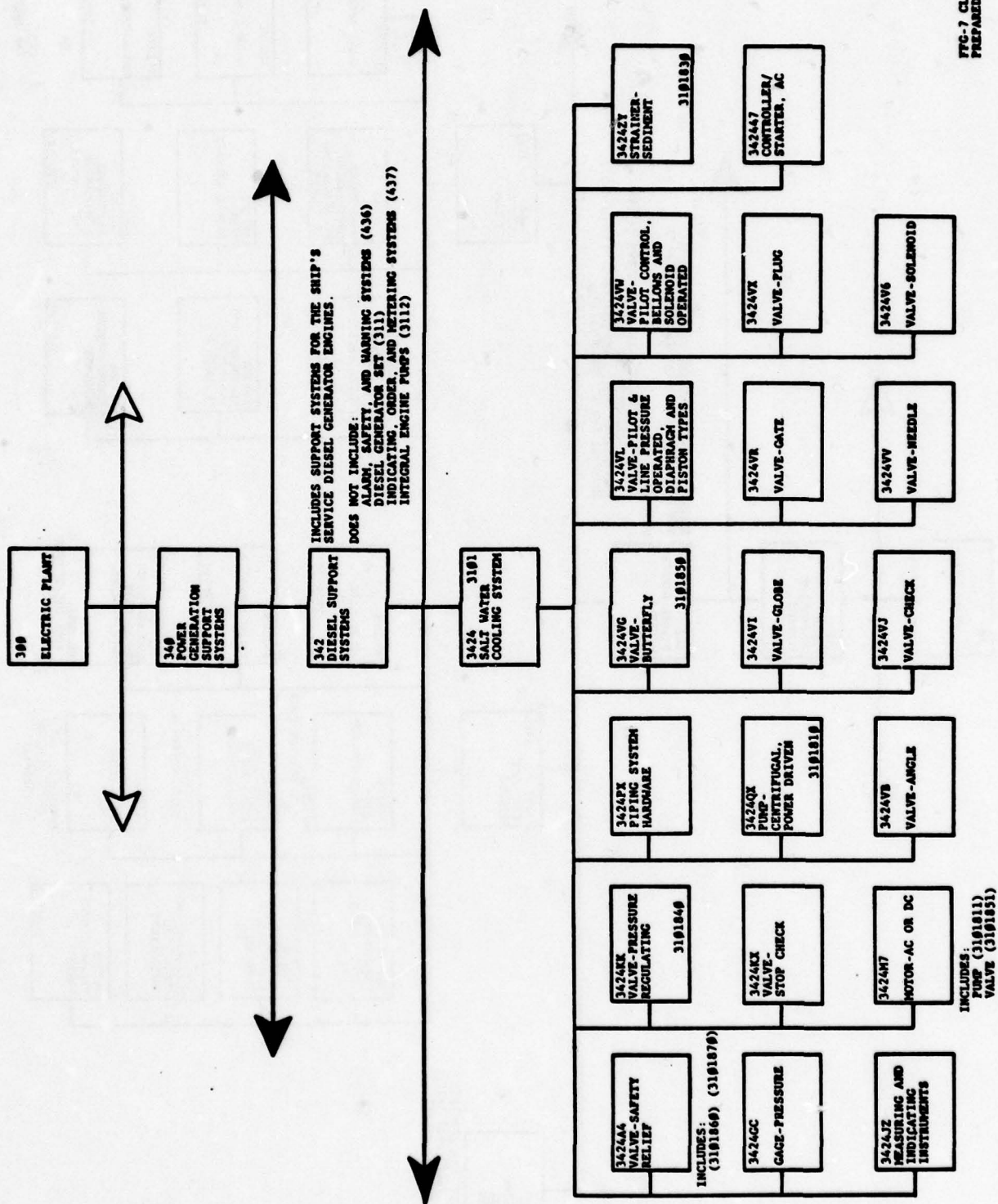


FIG-7 CLASS
PREPARED 6-29-79

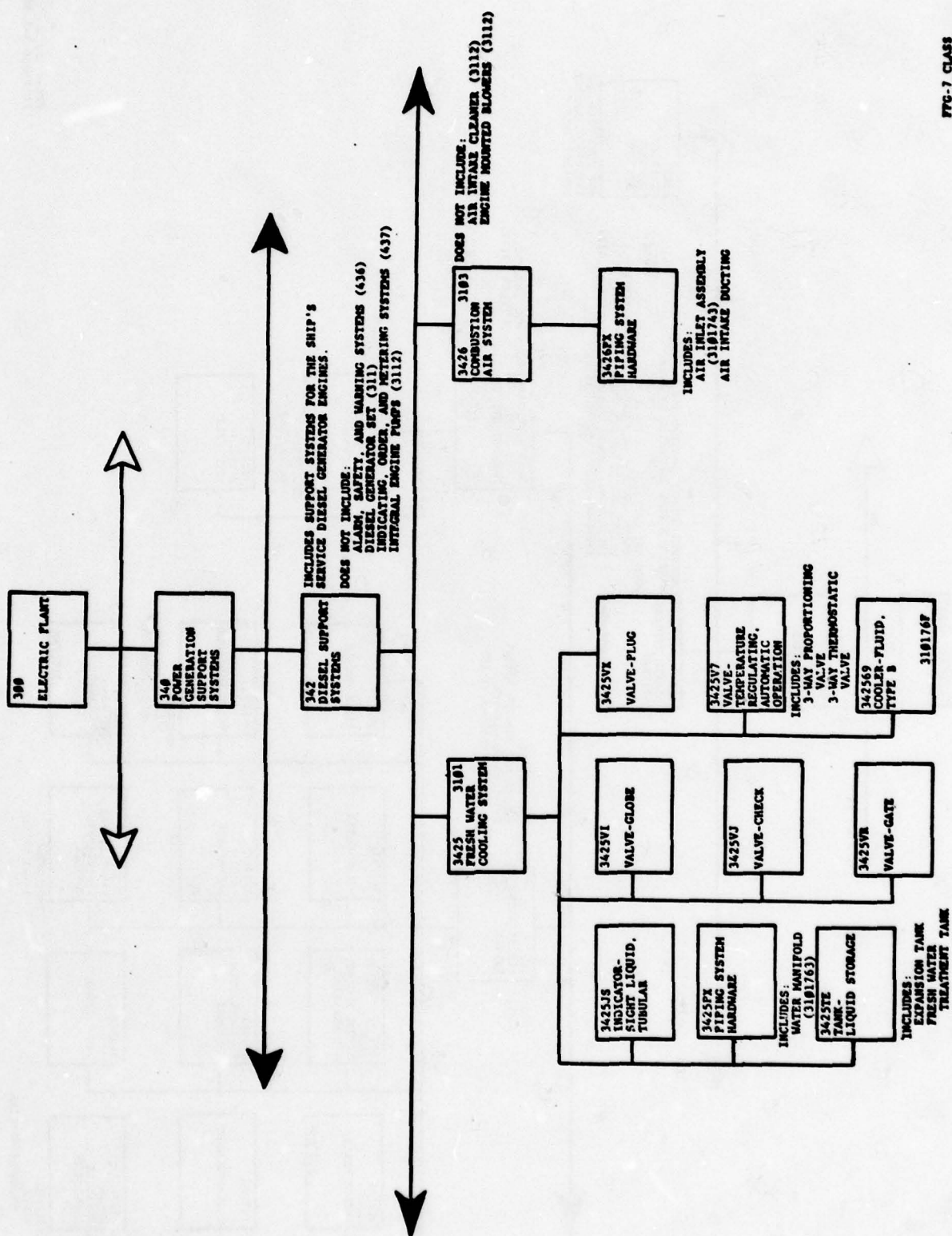


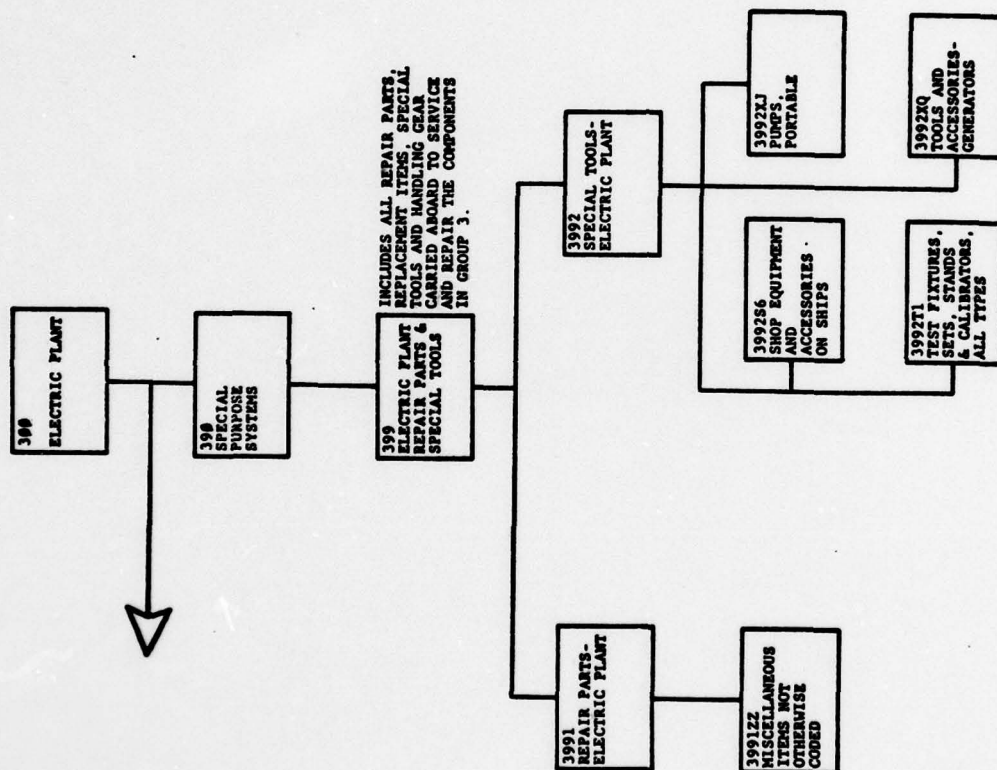




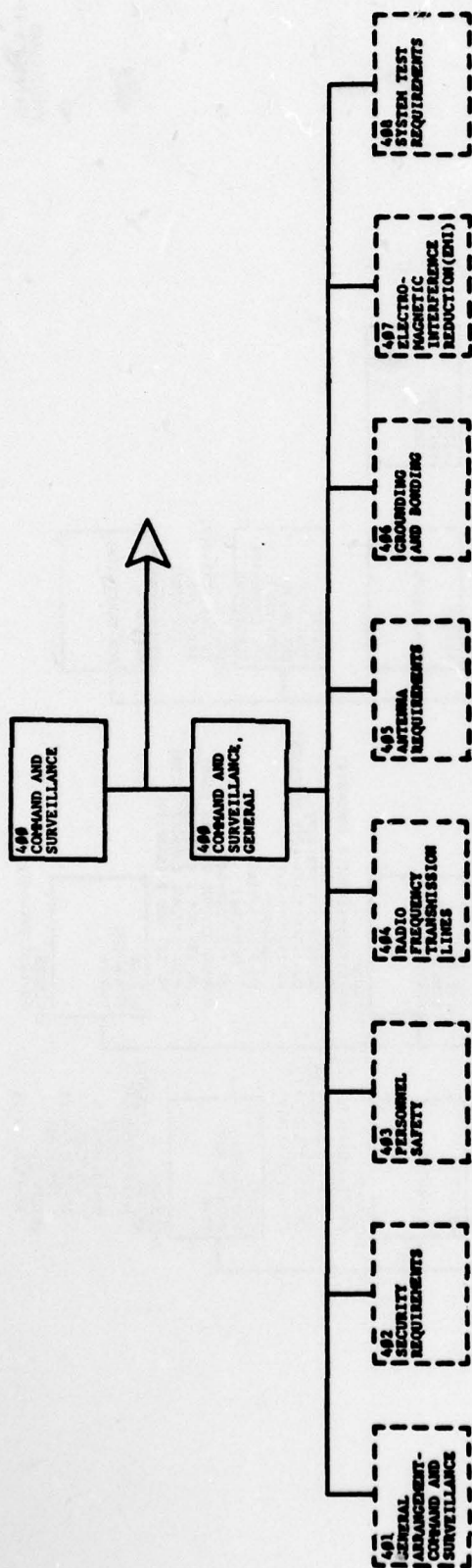


FFC-7 CLASS
PREPARED 4-18-79





FTO-7 CLASS
PREPARED 3-1-79



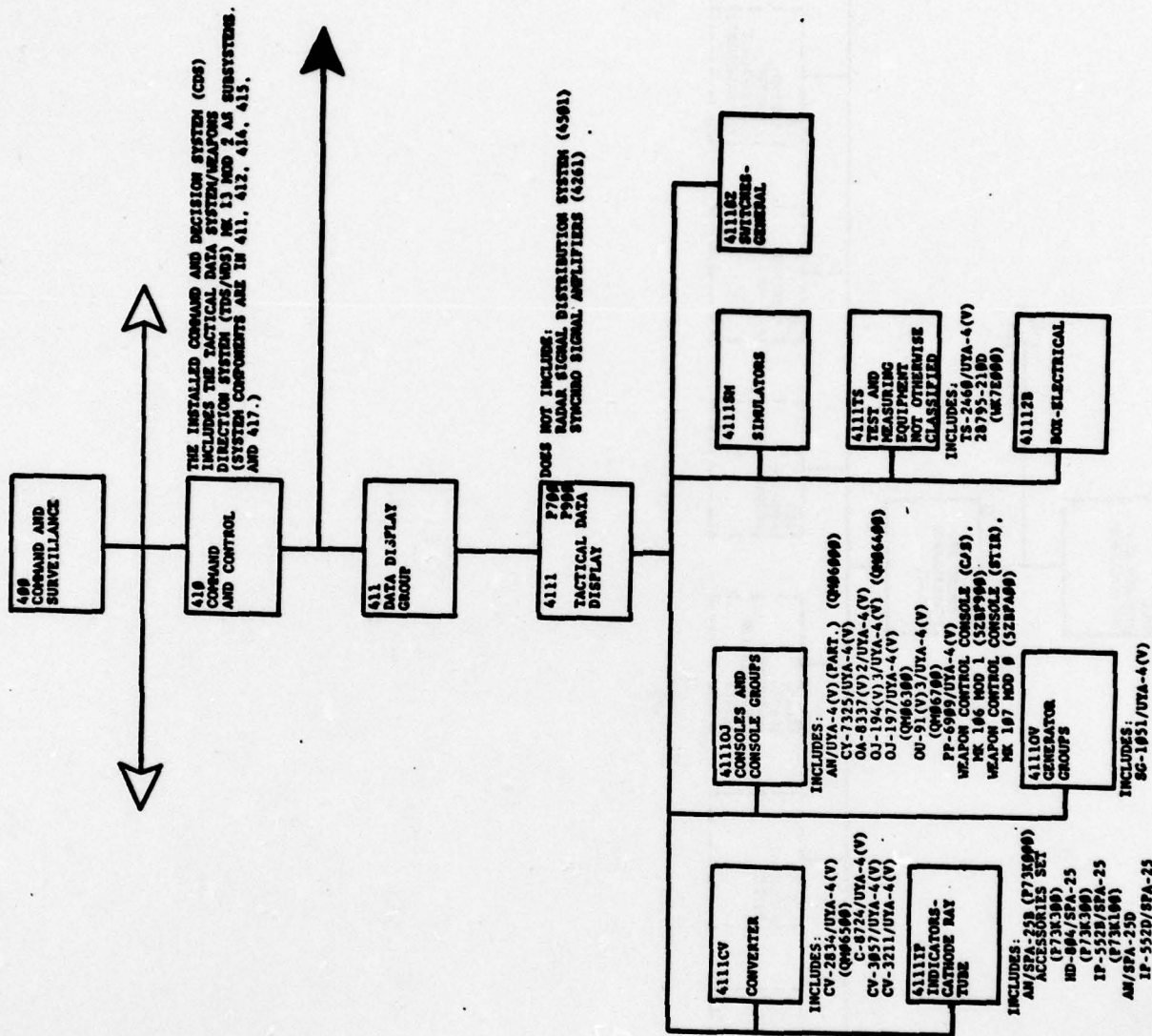


FIG-7 CLASS
 PREPARED 6-29-79

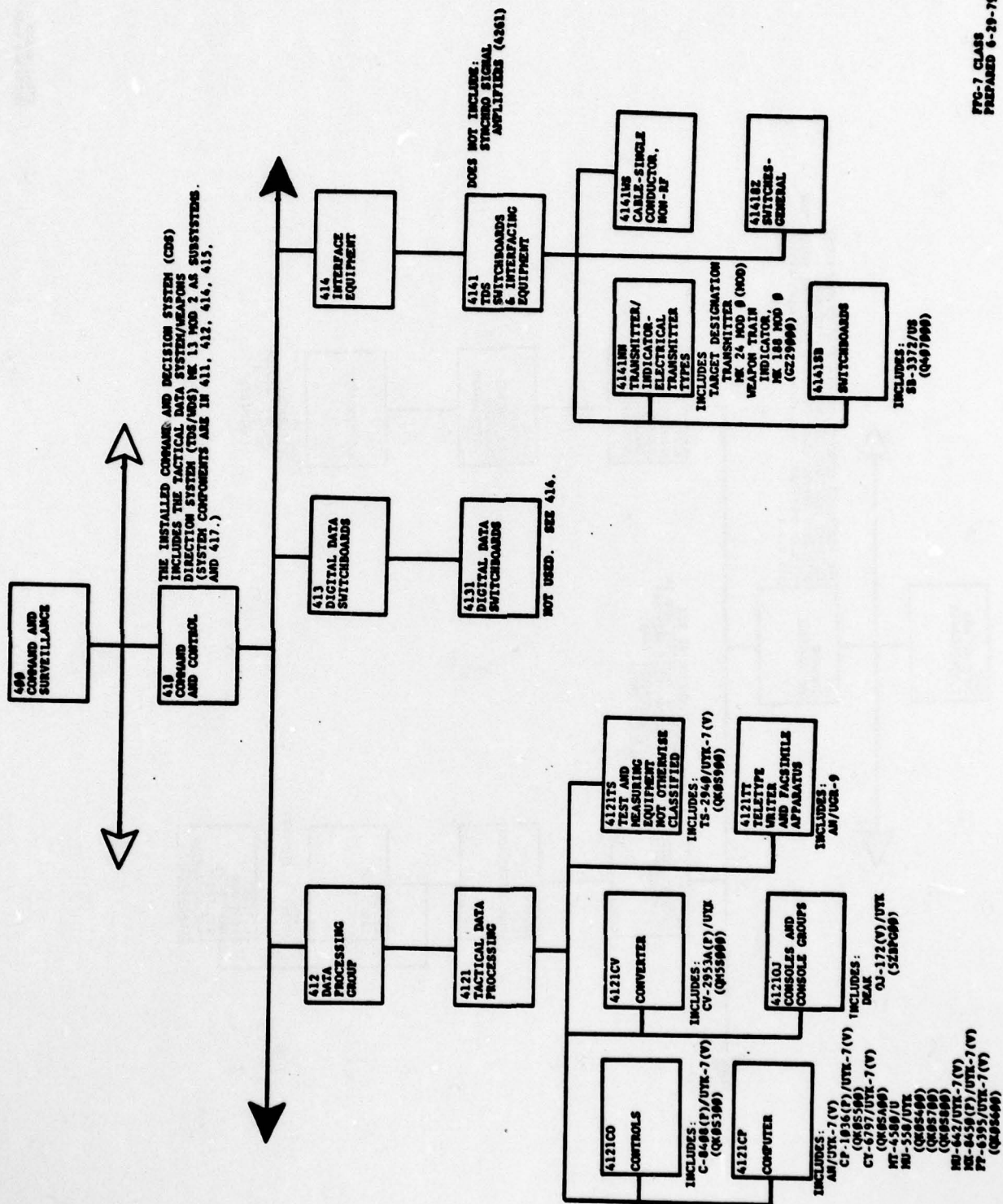


FIG-7 CLASS
PREPARED 6-29-79

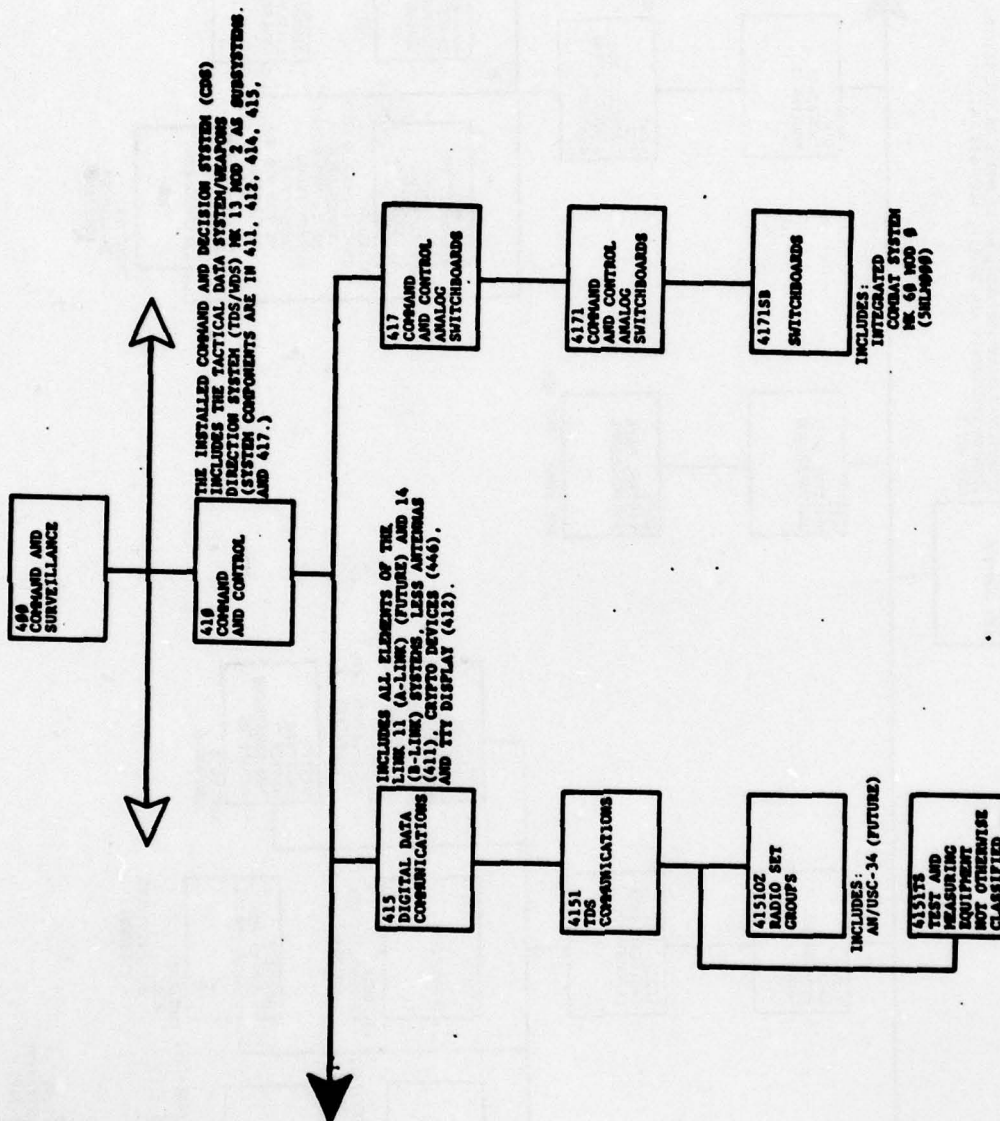
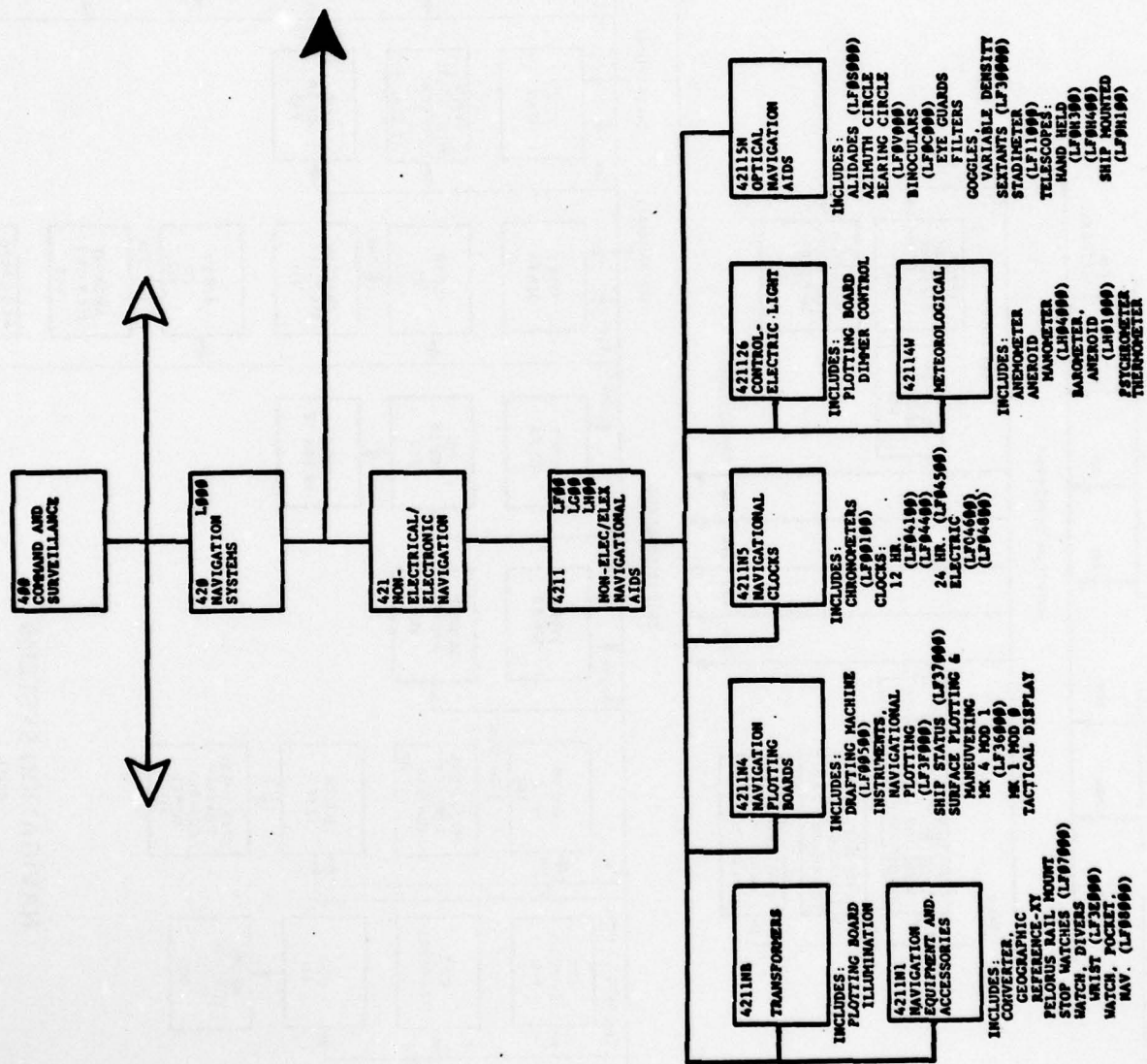


FIG-7 CLASS
PREPARED 6-29-79



FFG-7 CLASS
PREPARED 6-29-79



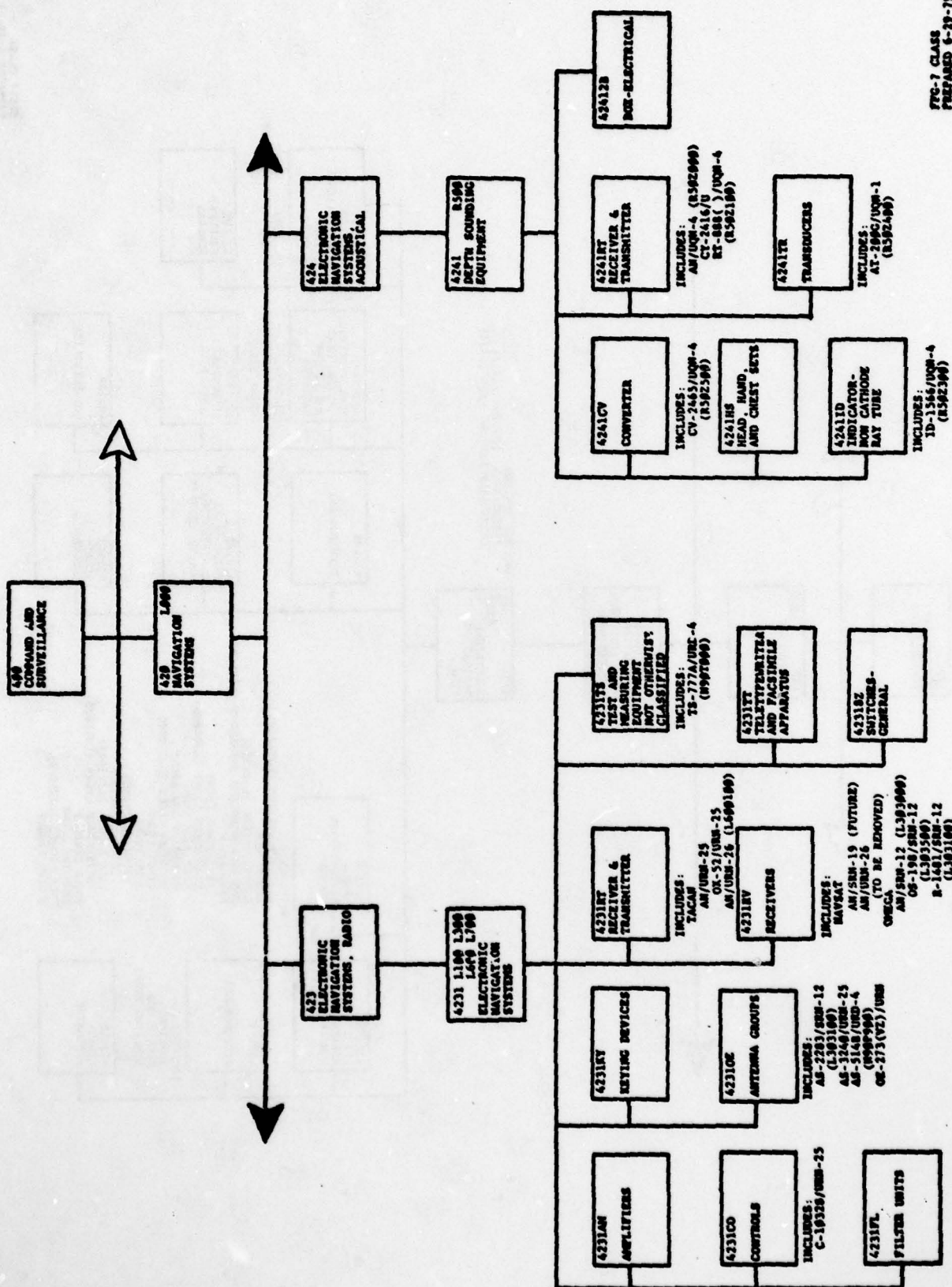
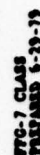
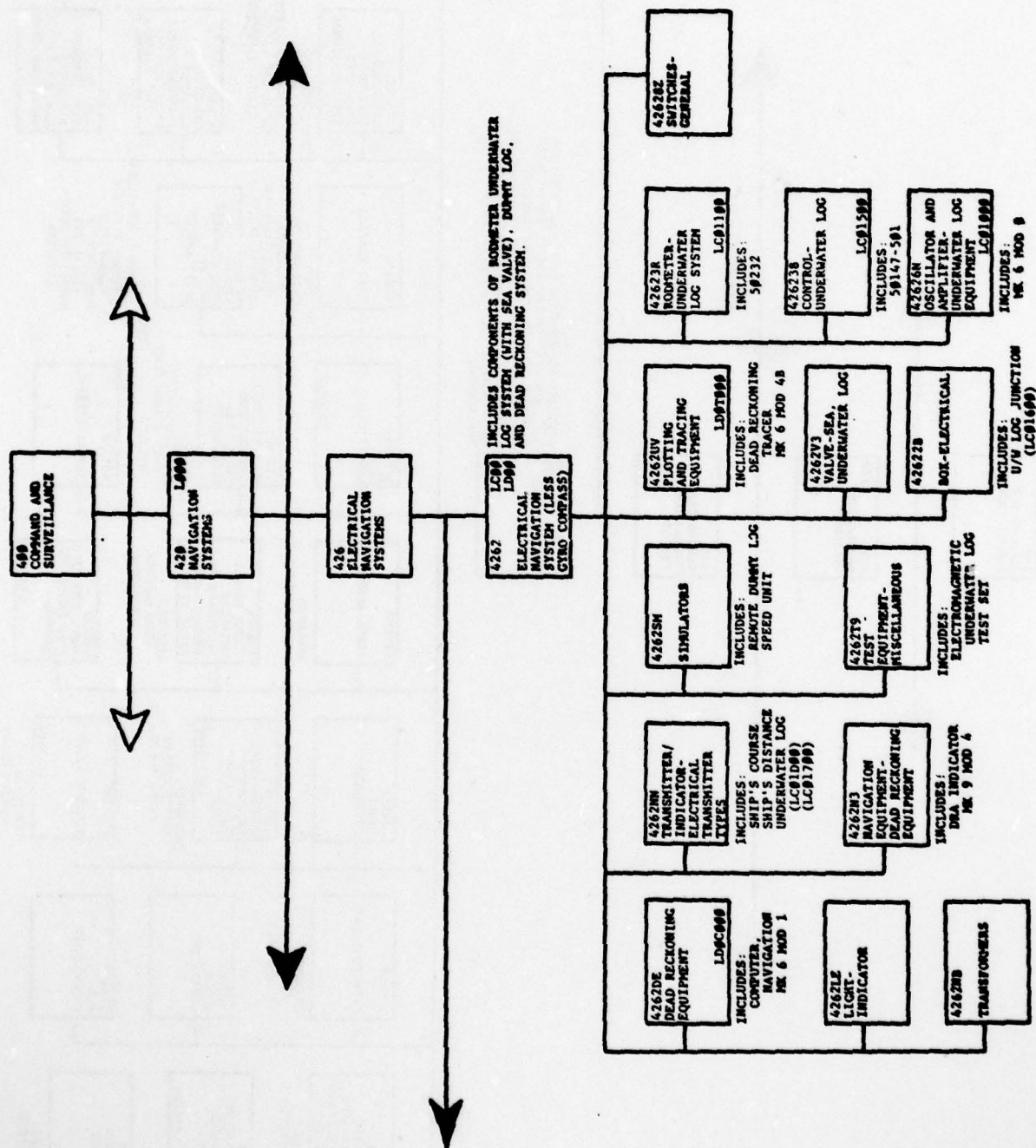


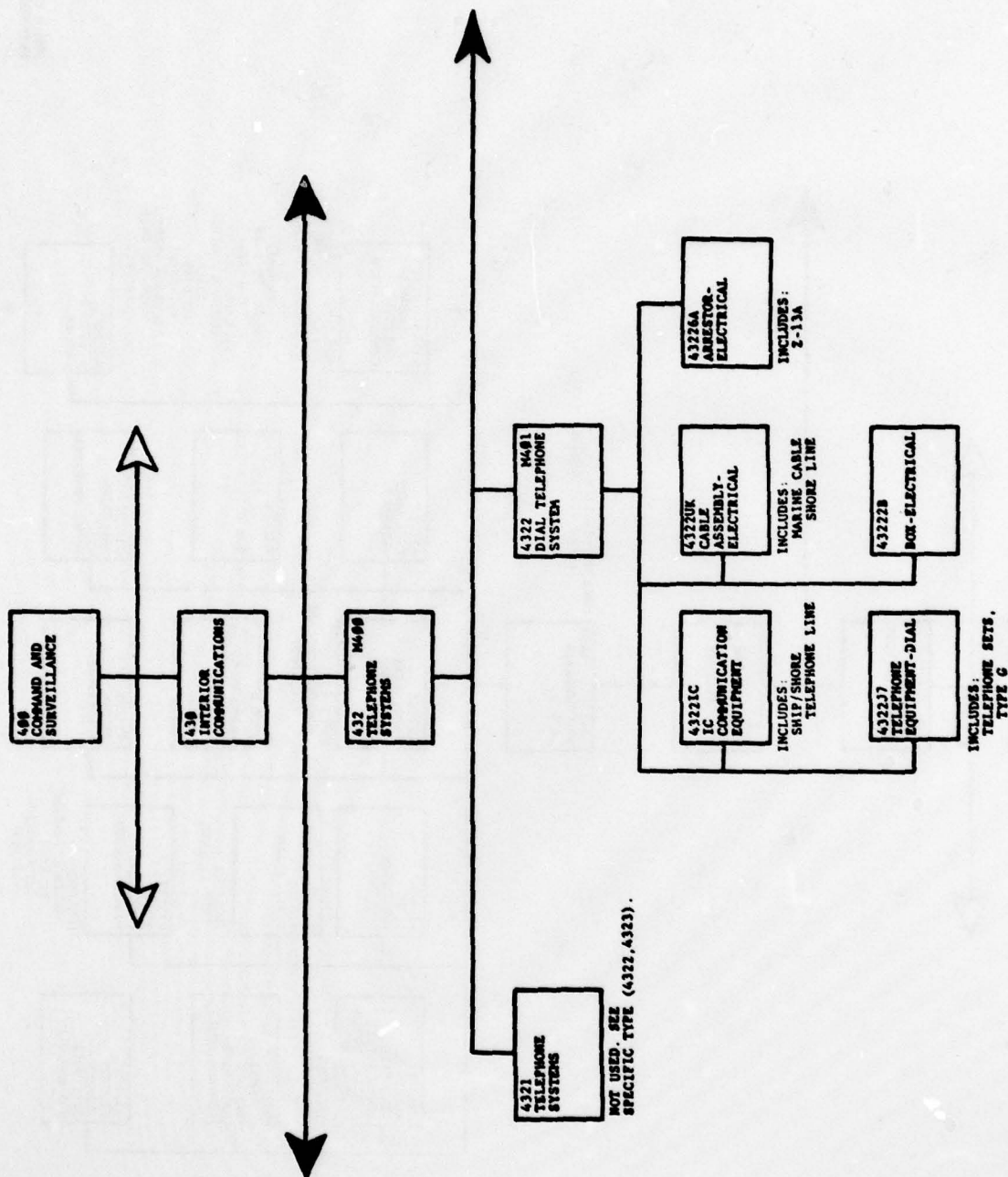
FIG-7 CLASS
PREPARED 6-29-79

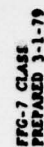




FTC-7 CLASS
PREPARED 3-1-79







AD-A073 541

ARINC RESEARCH CORP HONOLULU HI
SHIP SYSTEM STAGING DIAGRAMS FOR FFG-7 CLASS SHIPS.(U)
JUL 79

F/G 13/10

UNCLASSIFIED

1861-01-1-1979

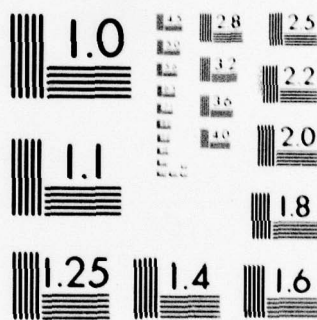
N00140-77-D-0417-0033

NL

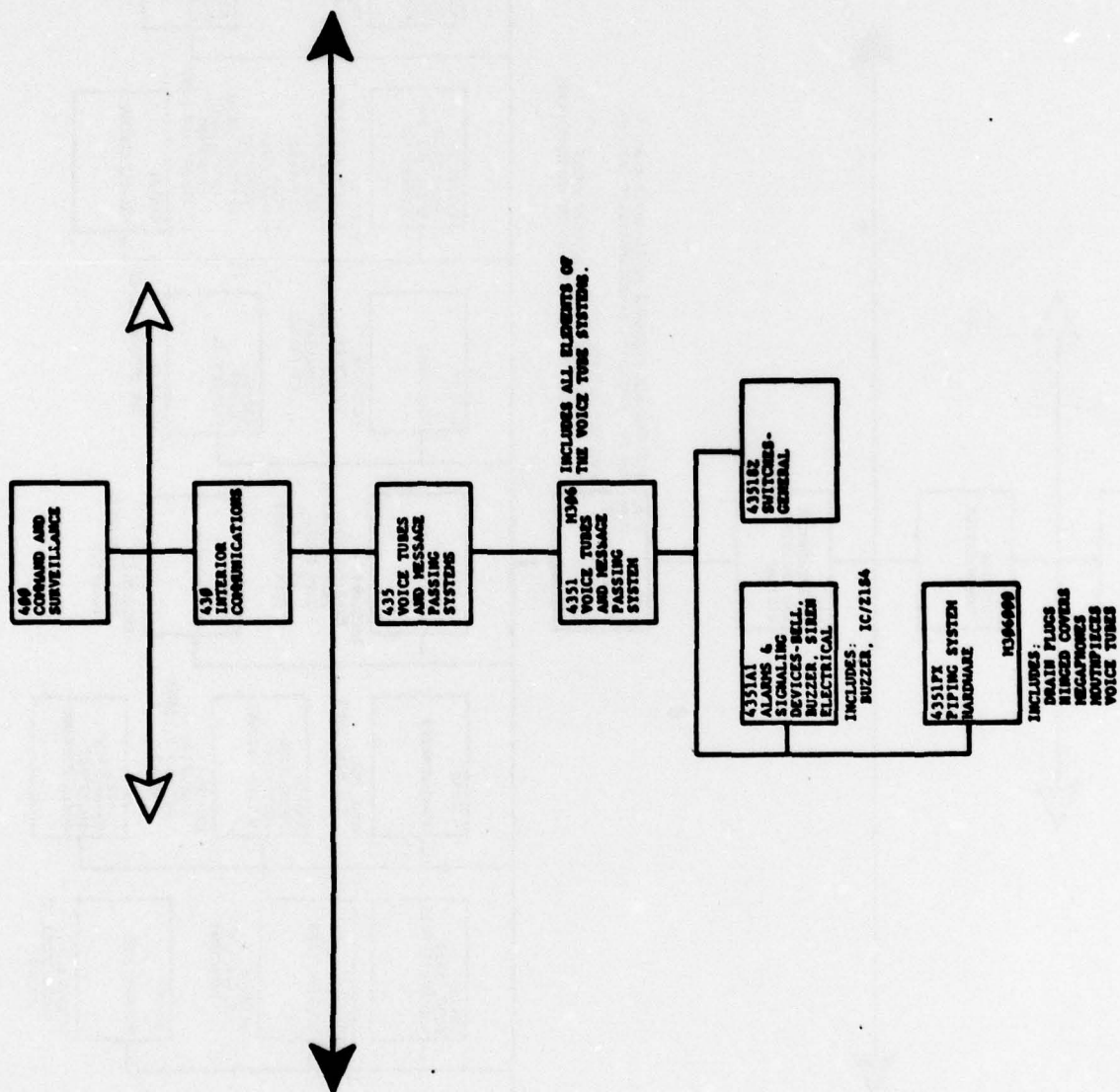
2 OF 3

AD-A073541

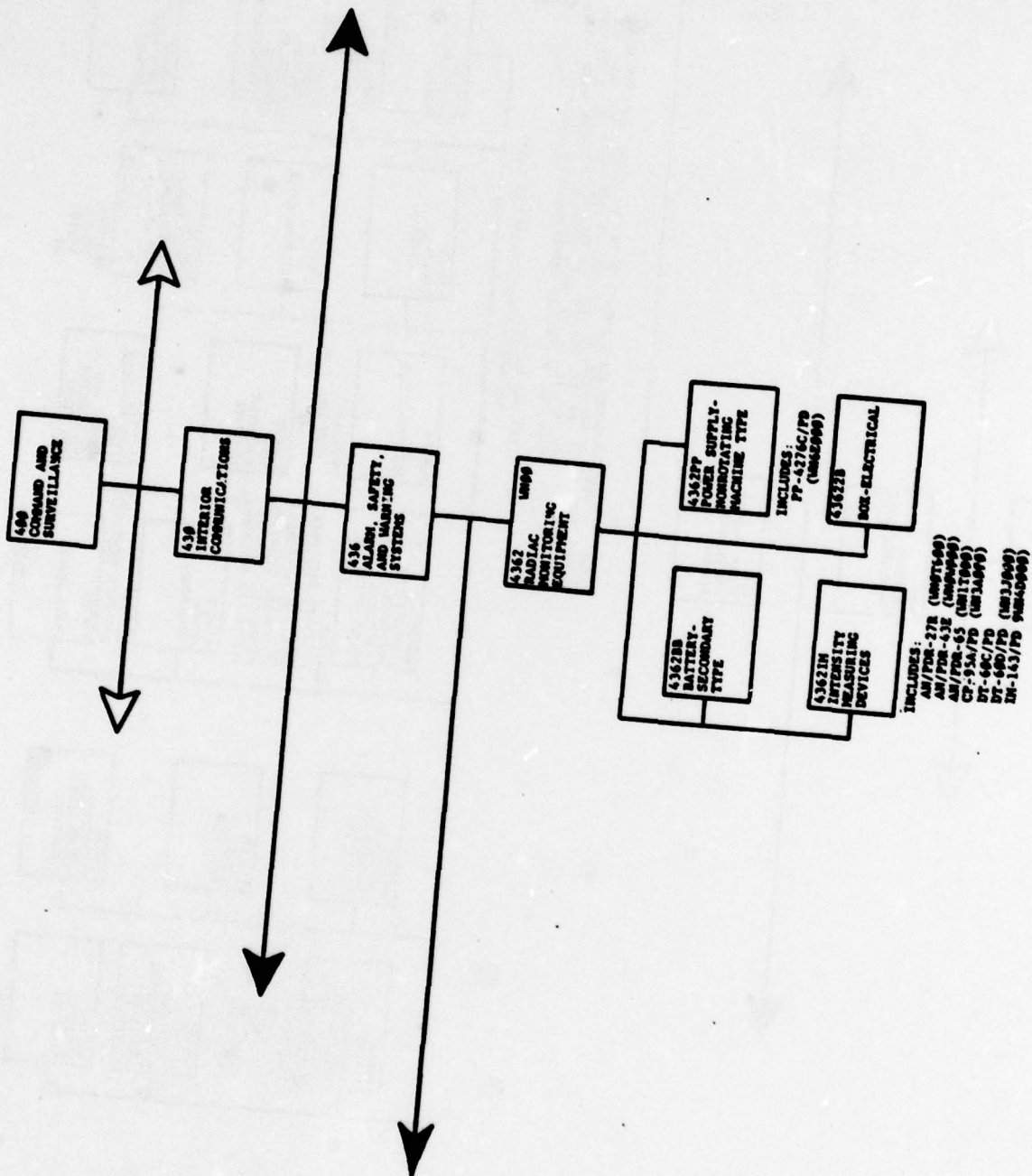


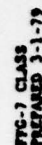


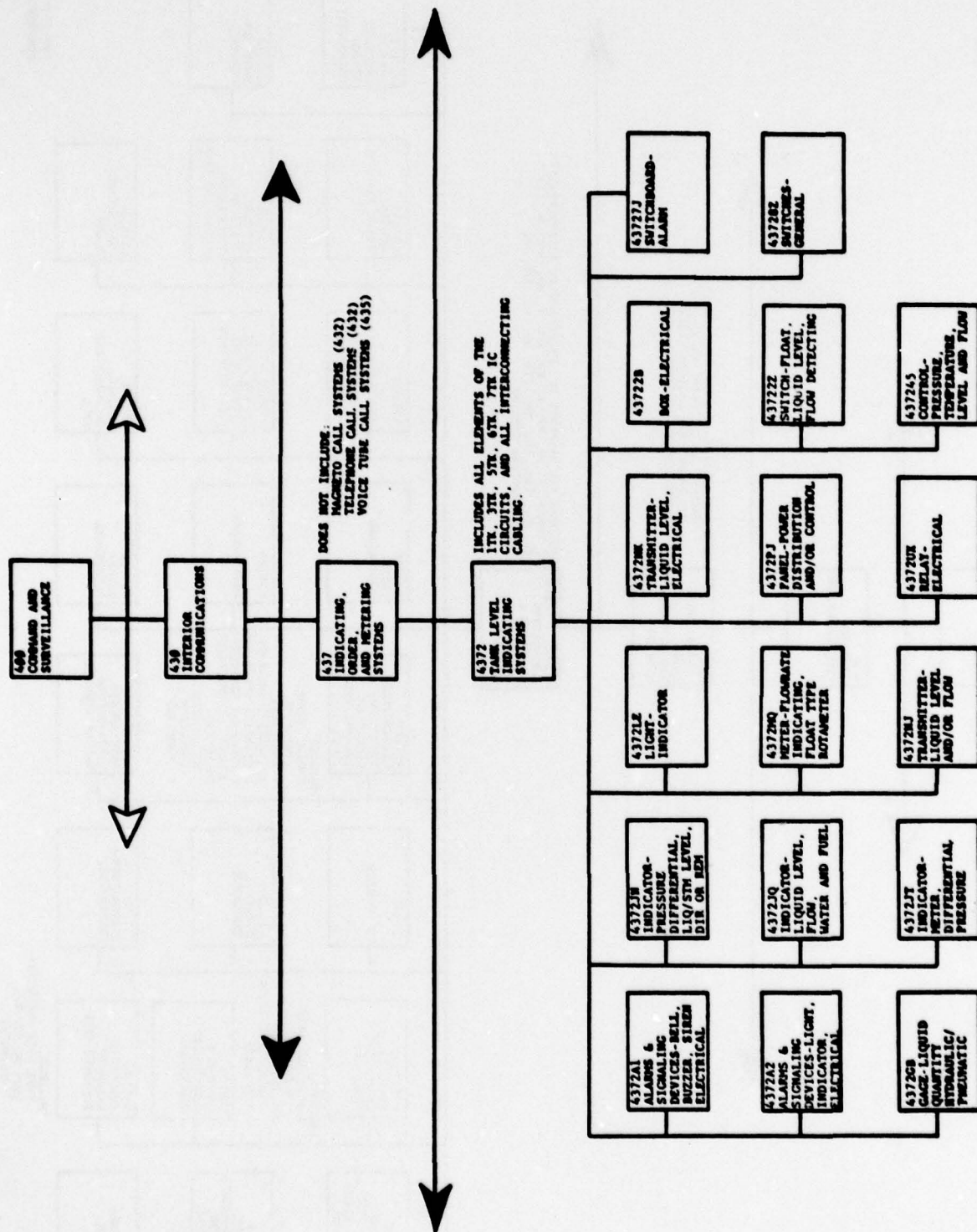
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



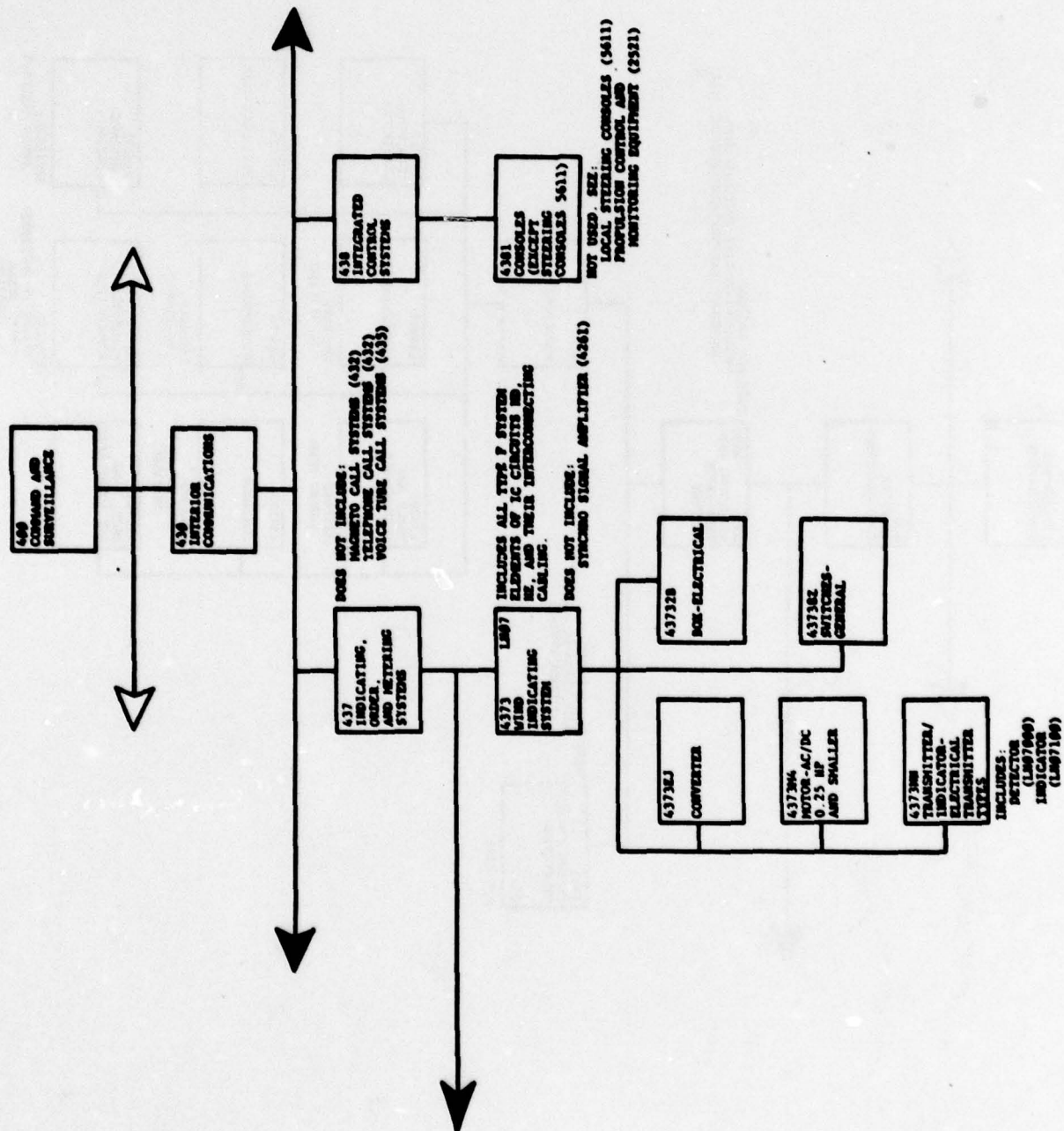


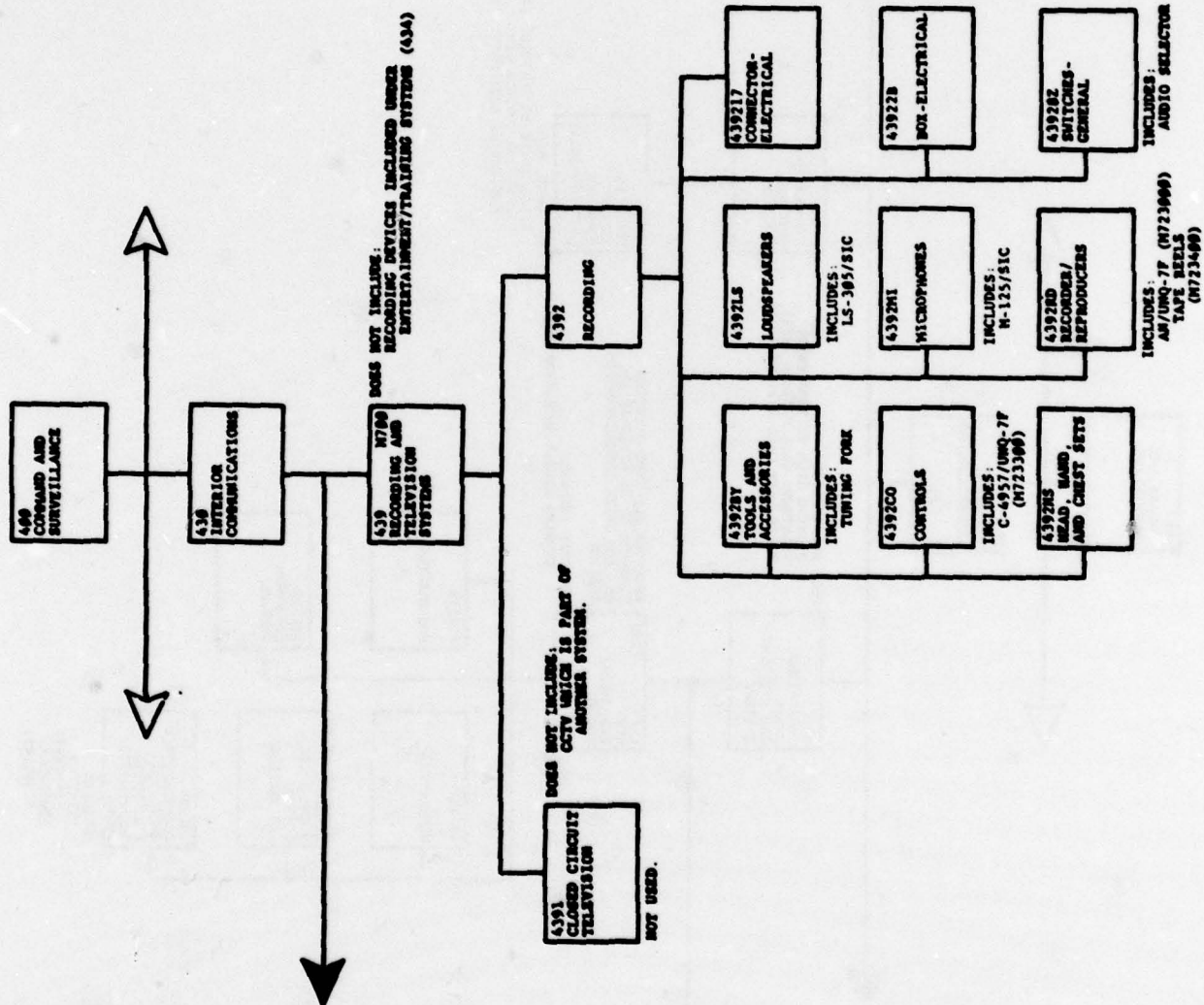




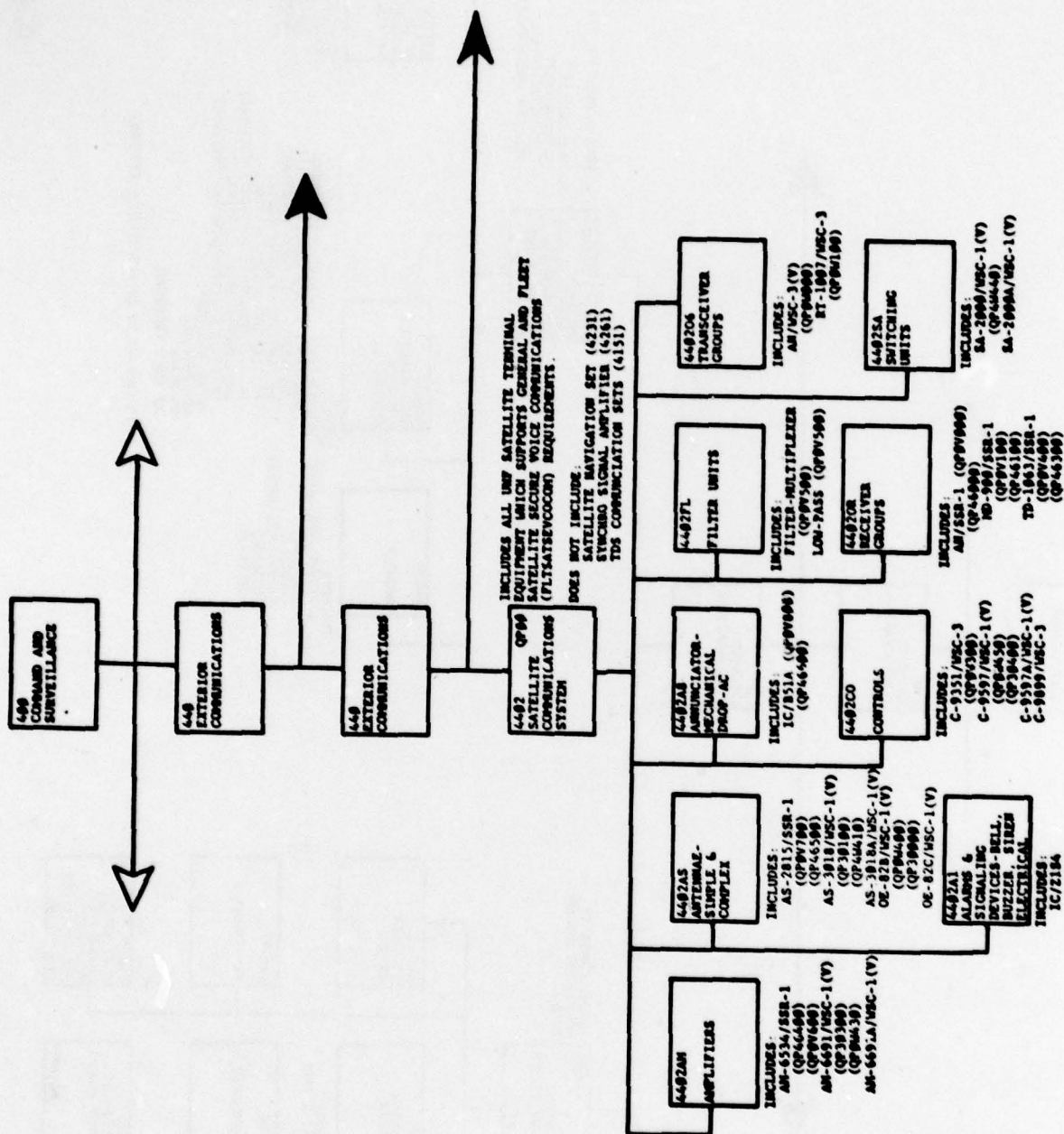


FFC-7 CLASS
PREPARED 3-1-79





FFC-7 CLASS
PREPARED 3-1-79



FFC-7 CLASS
PREPARED 6-29-70

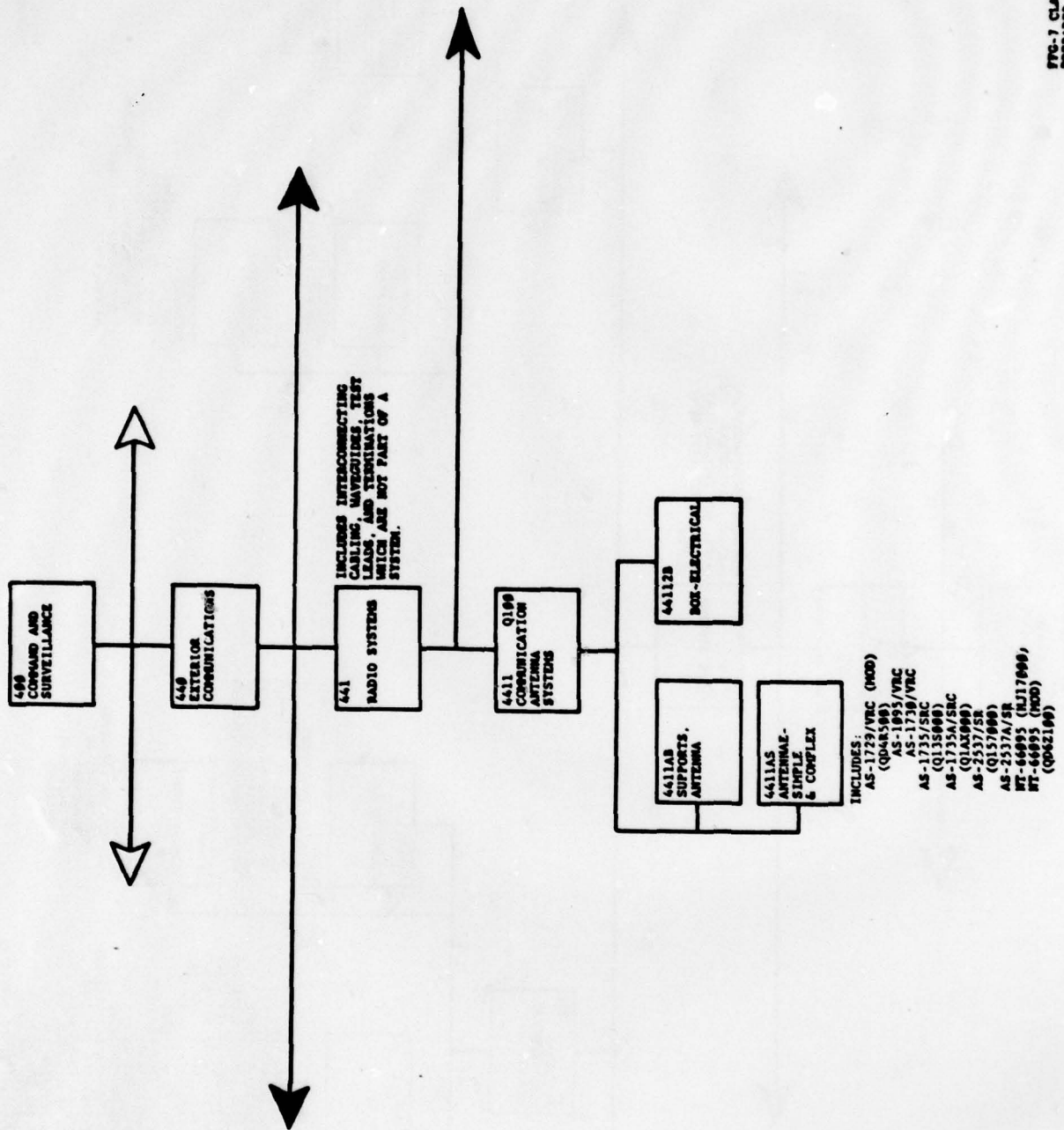
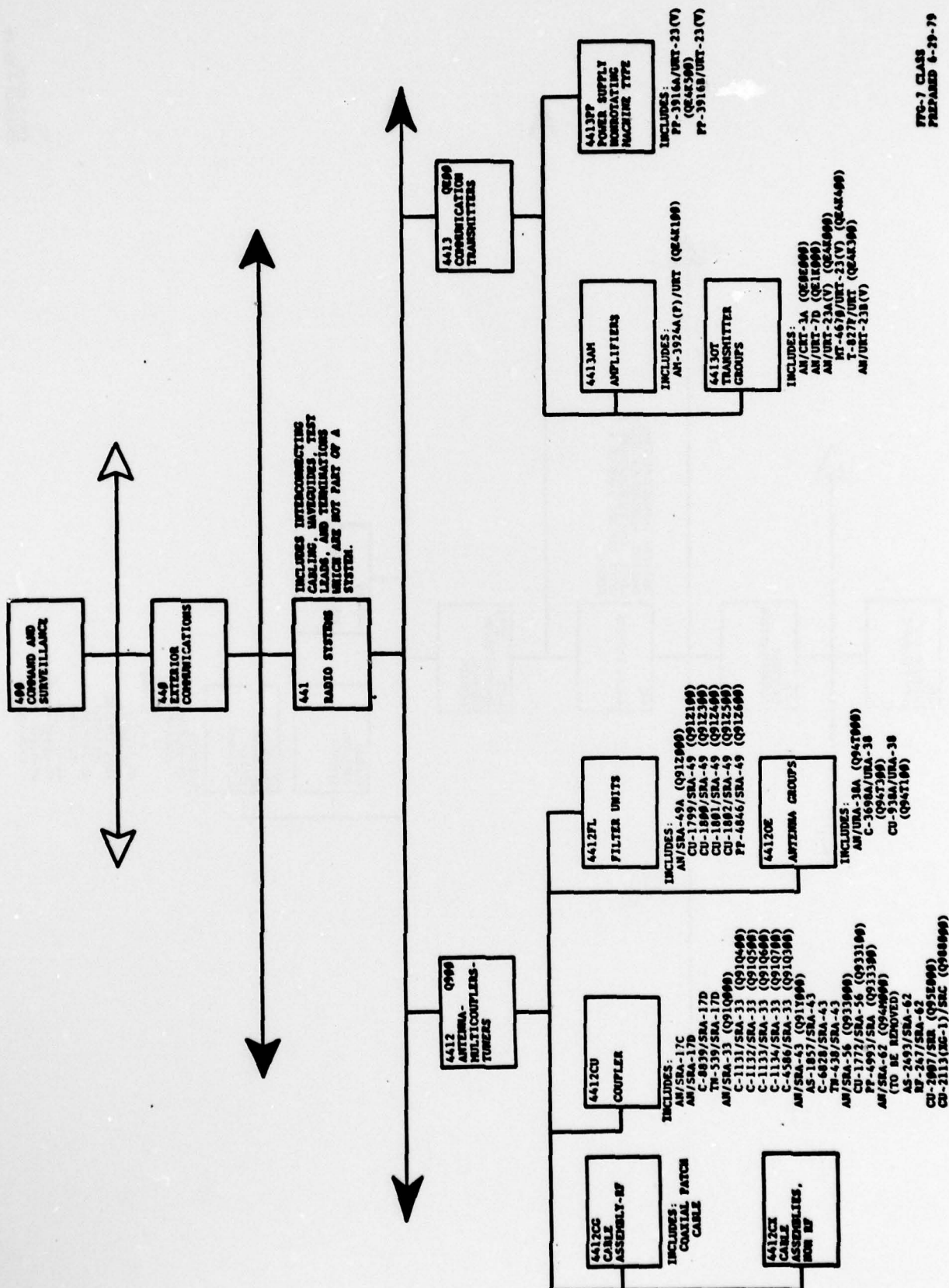
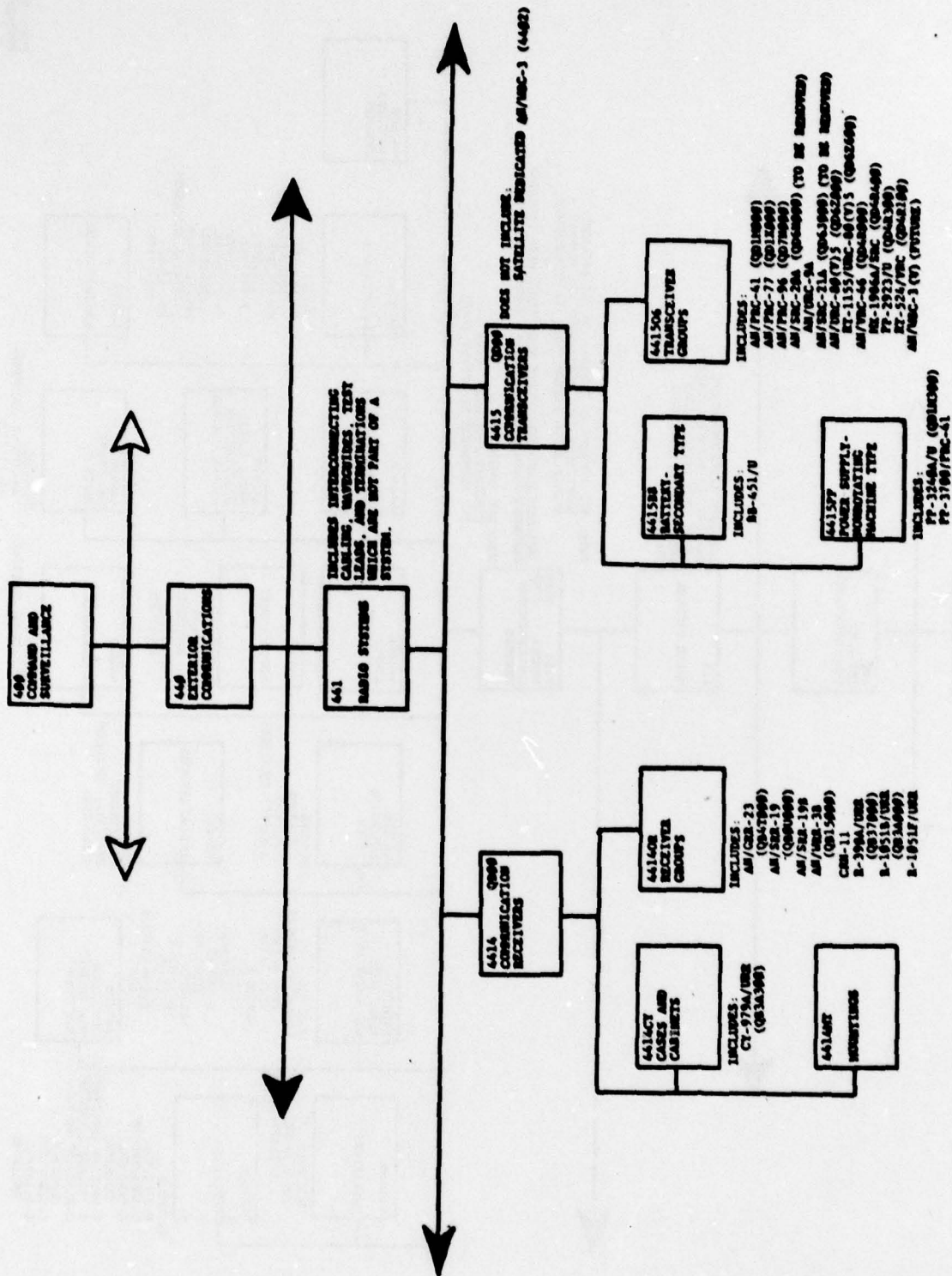


FIG-7 CLASS
PREPARED 6-29-79





PP-3 CLASS
PREPARED 6-20-79



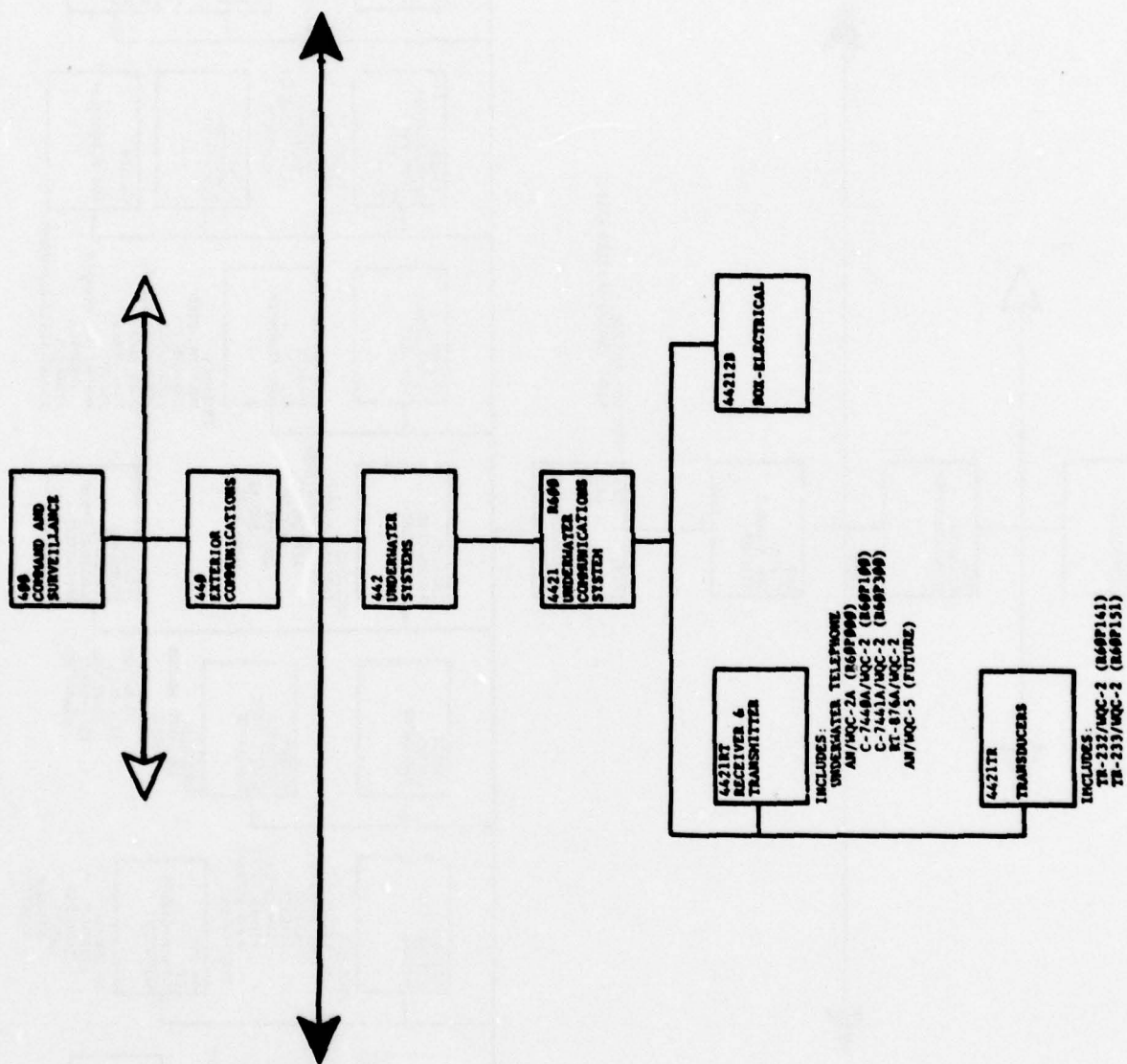
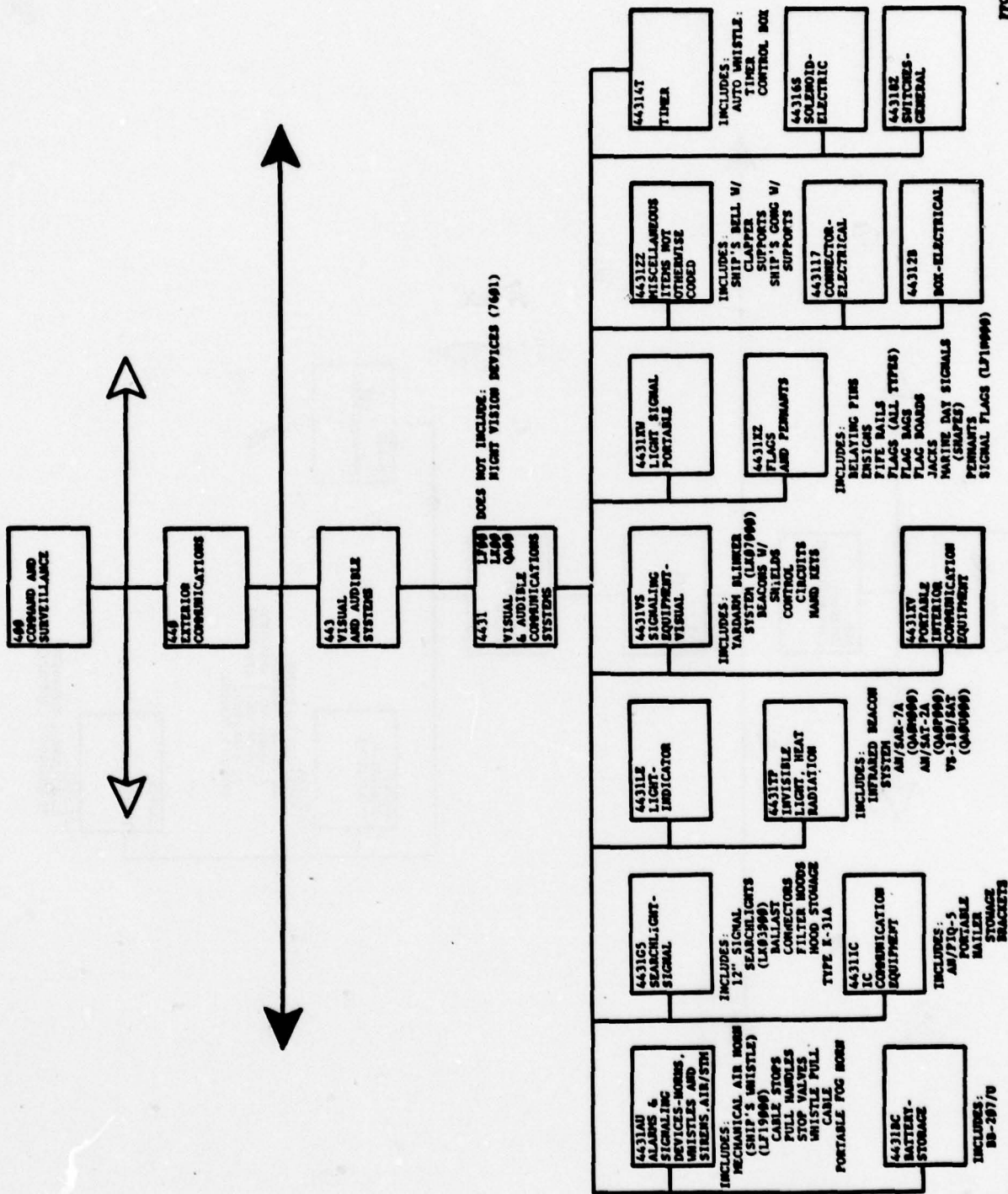
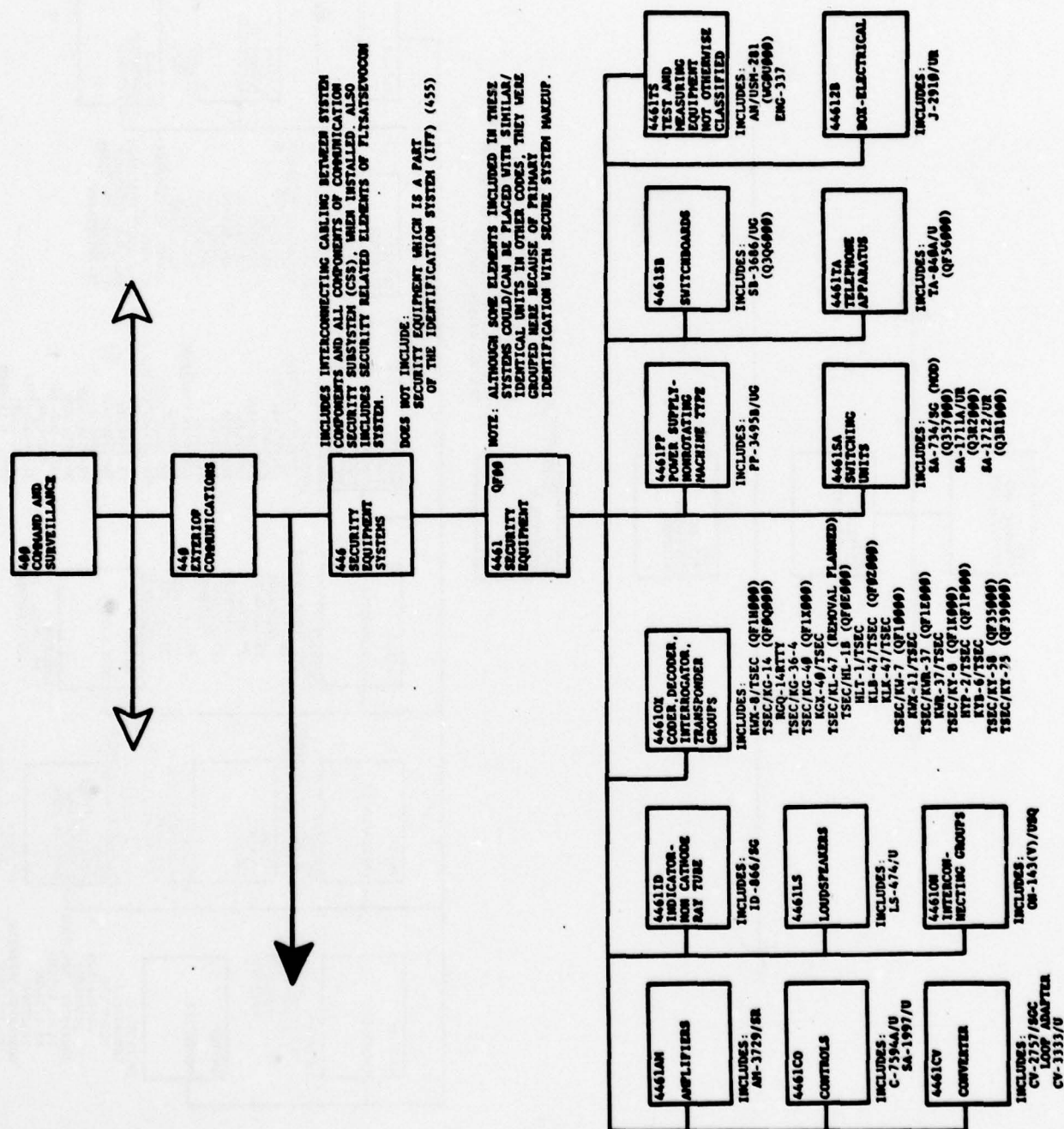


FIG-7 CLASS
PREPARED 3-1-79

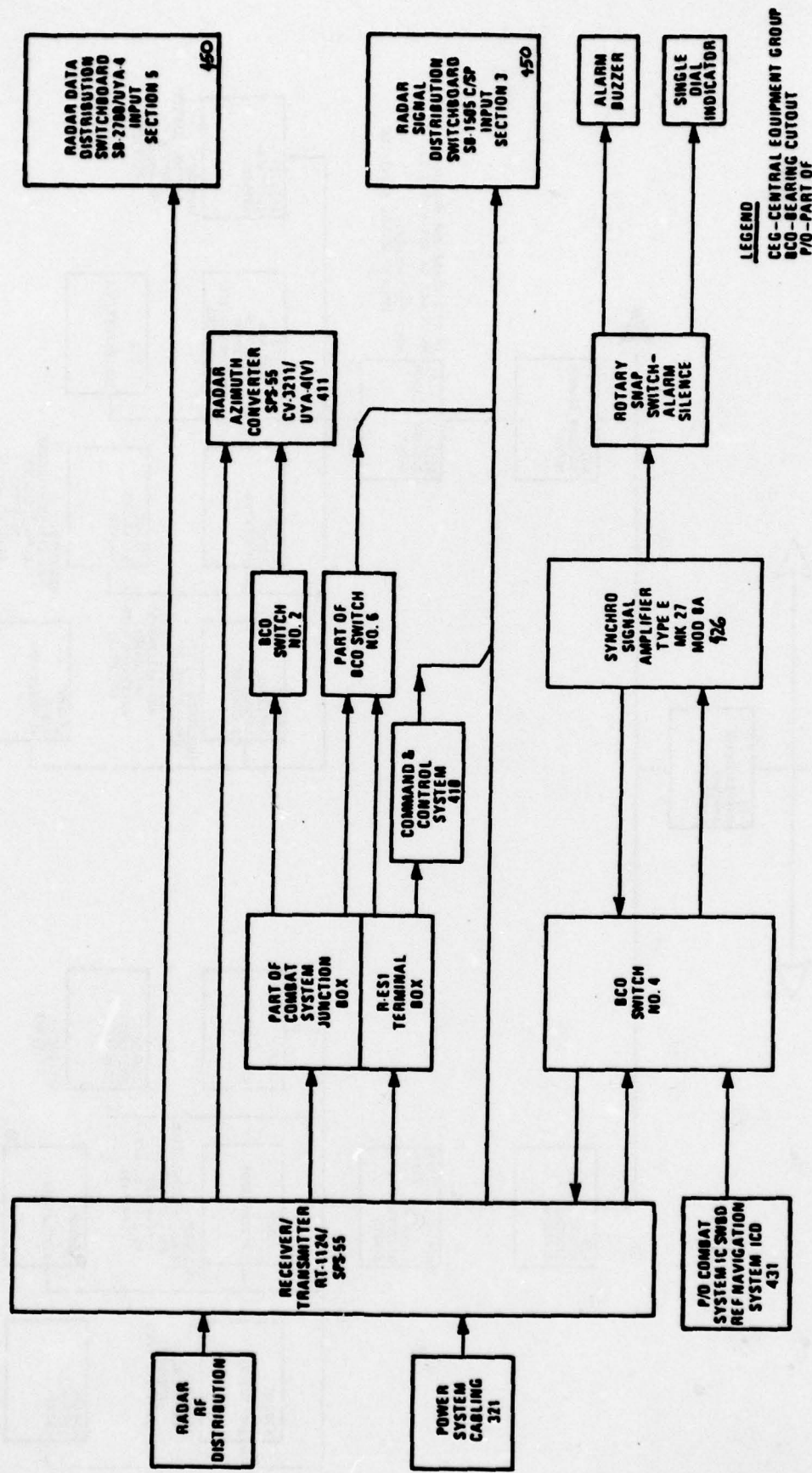


PTC-7 CLASS
PREPARED 6-29-79



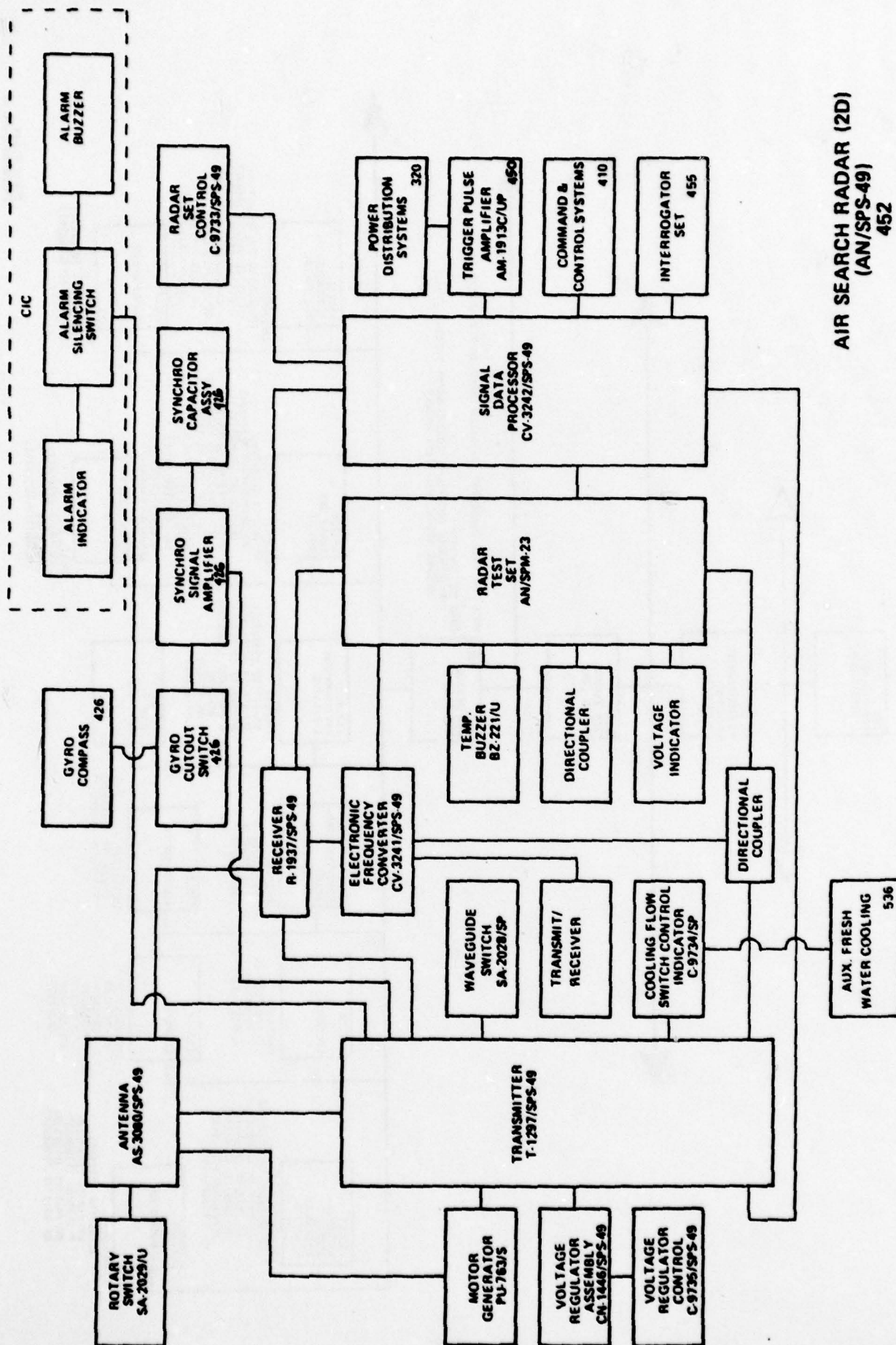


PPC-7 CLASS
PREPARED 6-29-79

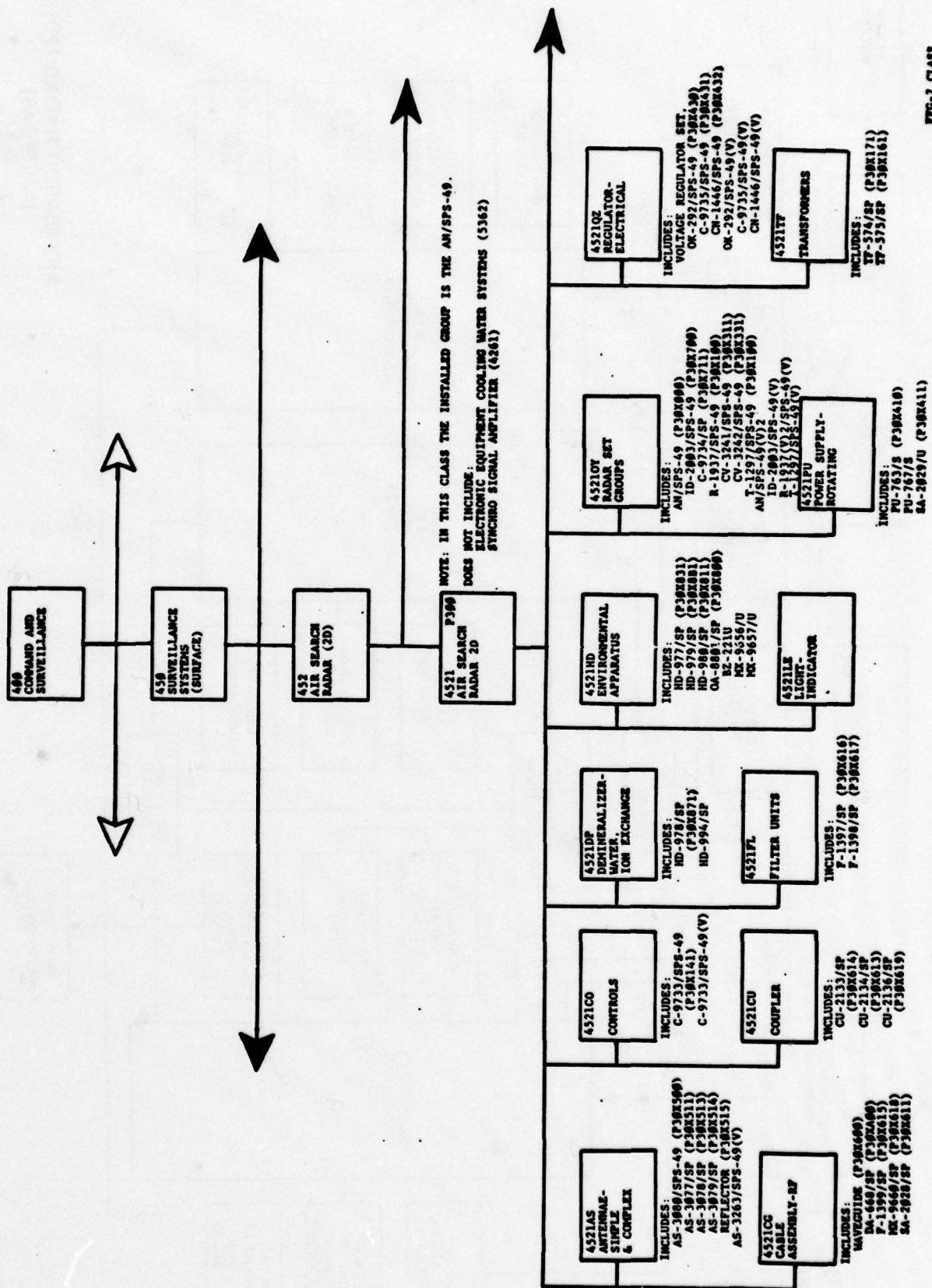


LEGEND
 CEG-CENTRAL EQUIPMENT GROUP
 BCO-BEARING CUTOFF
 P/O-PART OF

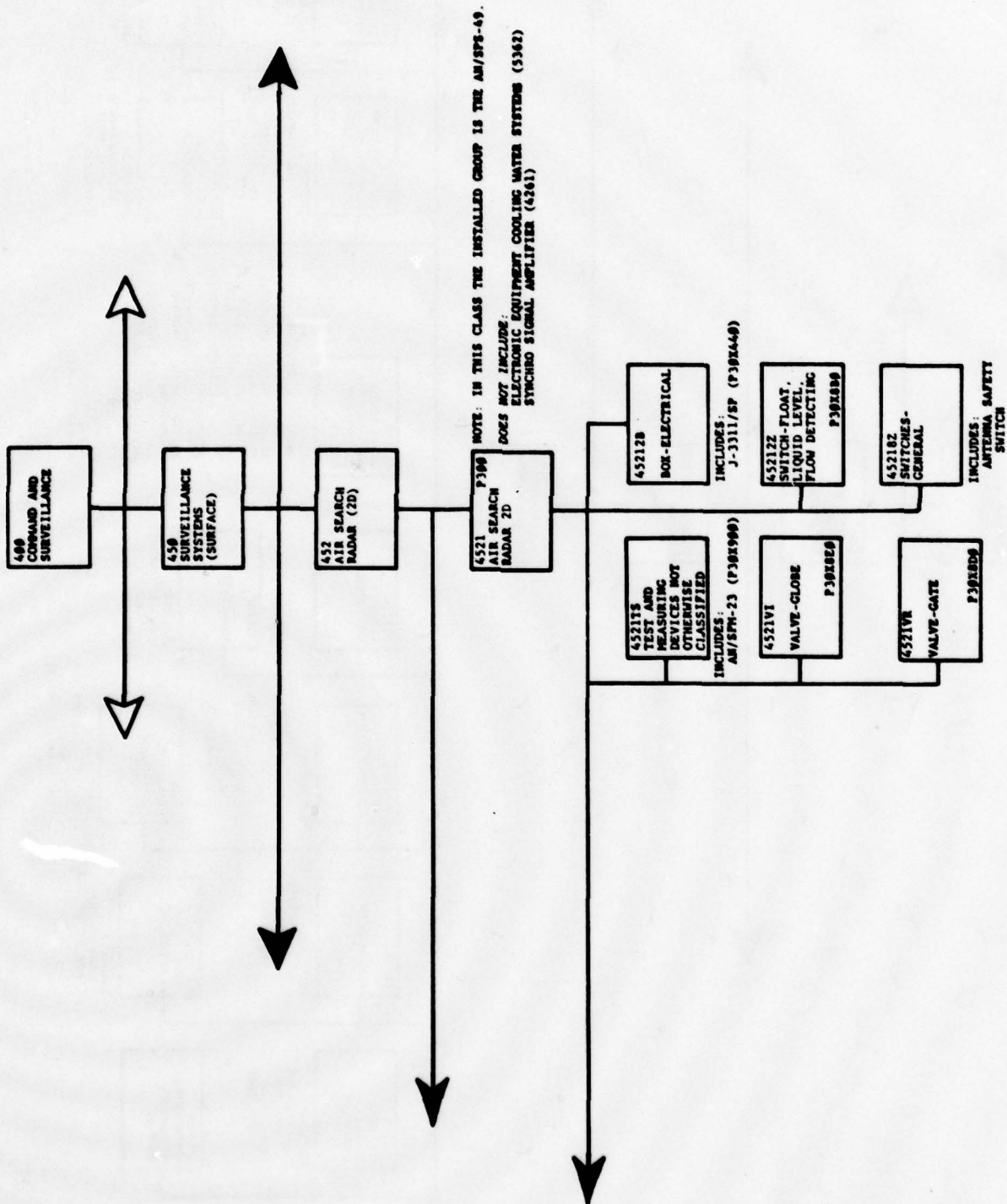
SURFACE SEARCH RADAR (AN/SPS-55)
451

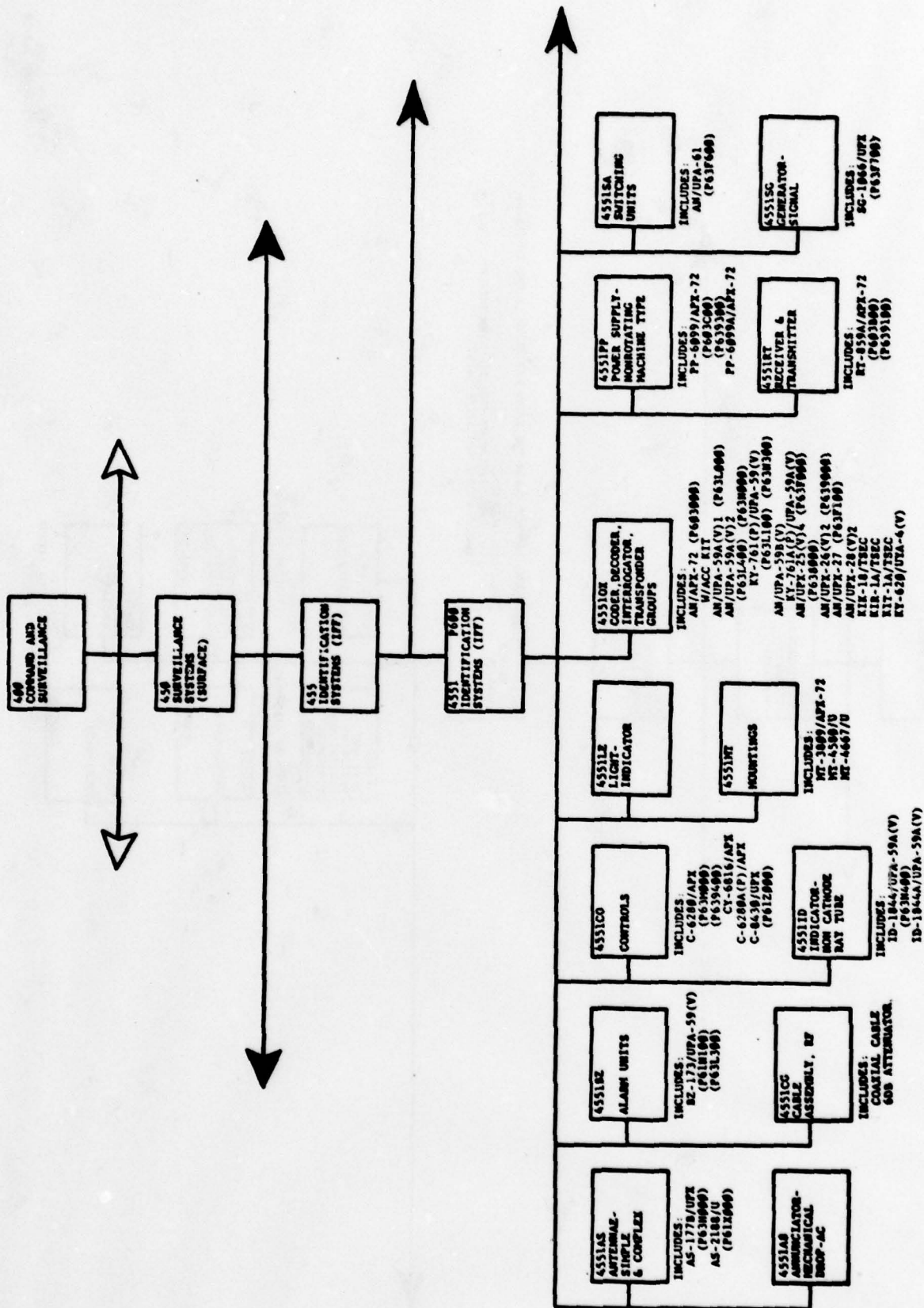


AIR SEARCH RADAR (2D)
(AN/SPS-49)
452



FFG-7 CLASS
PREPARED 6-29-79





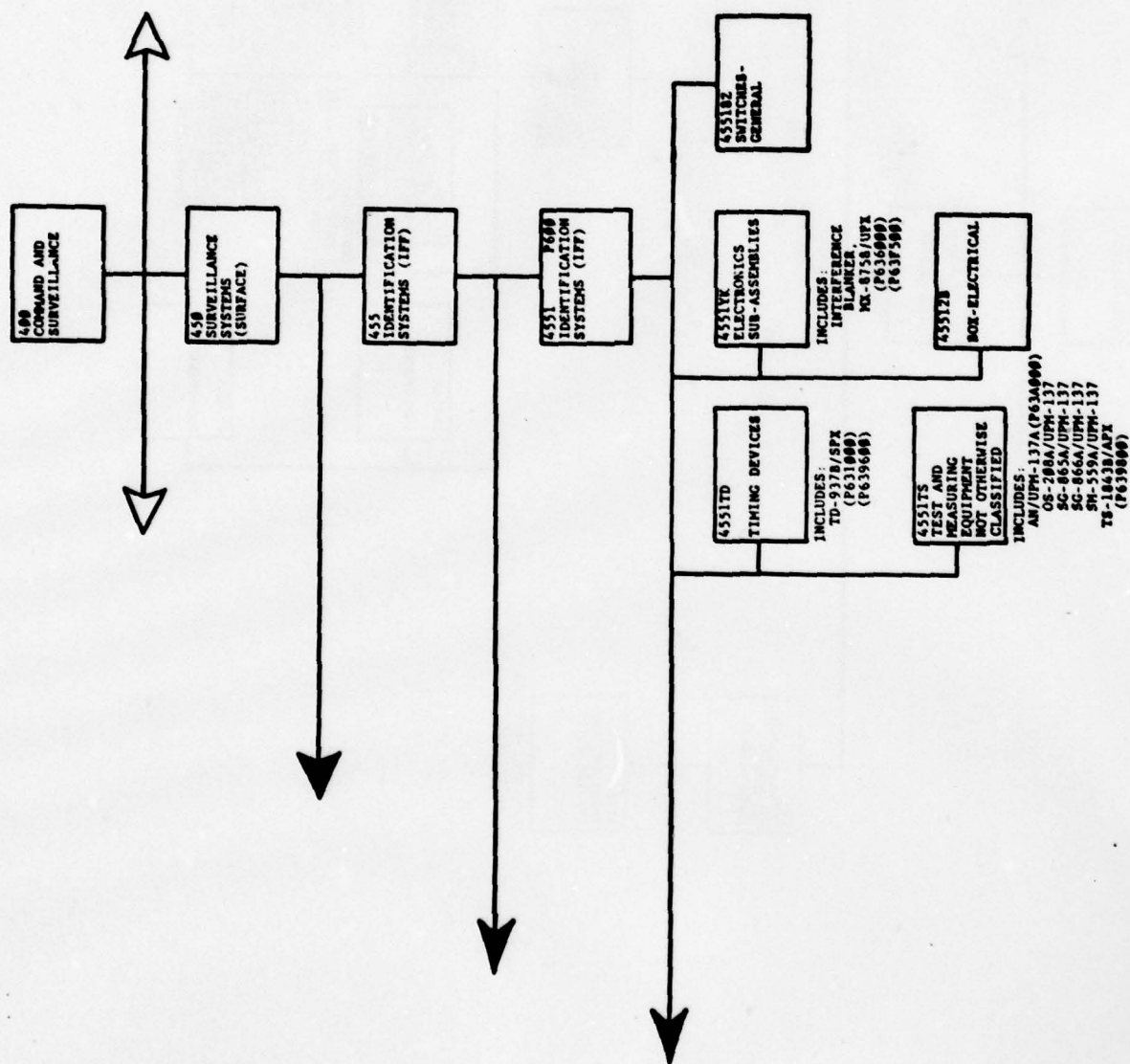
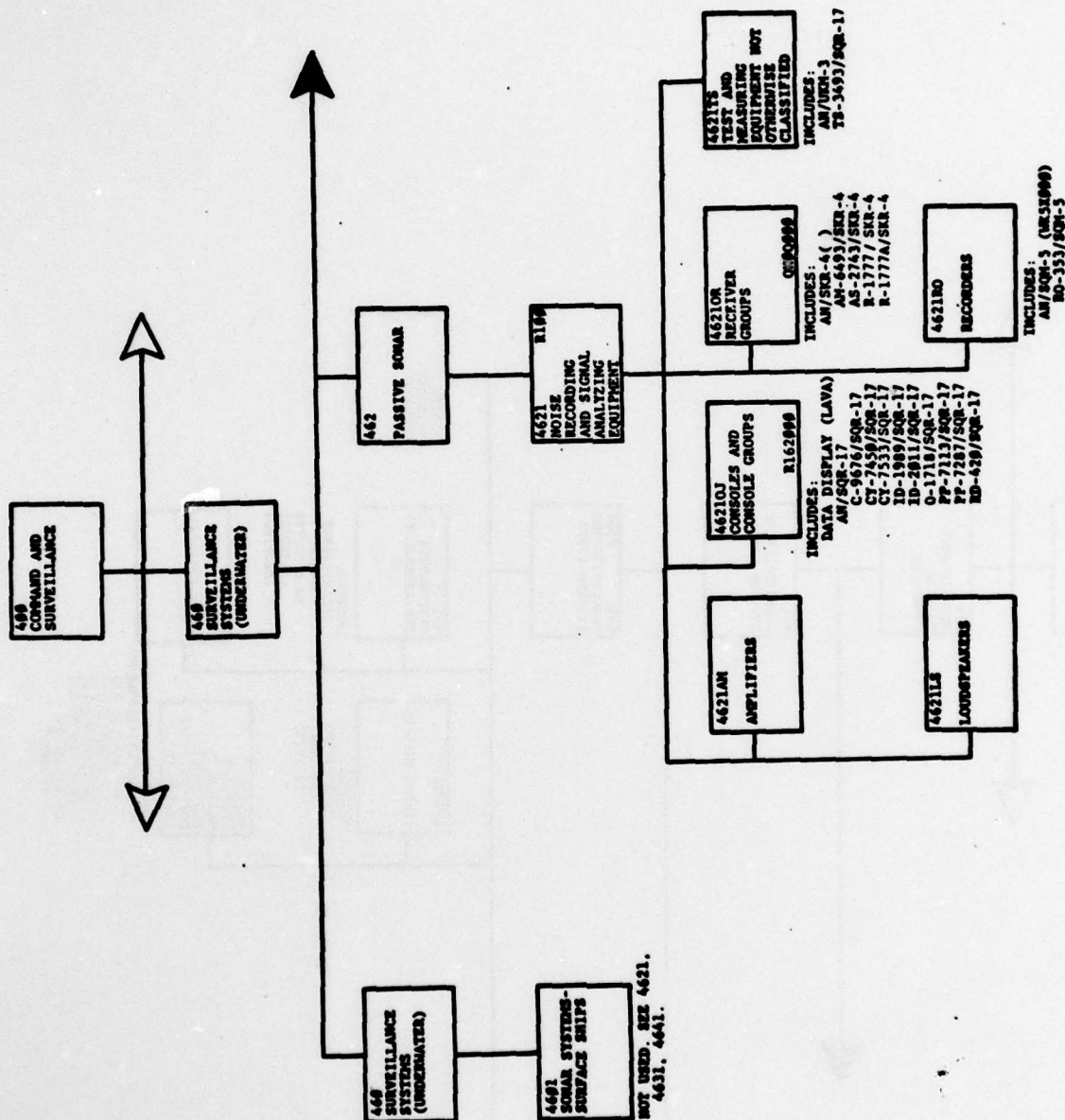


FIG-7 CLASS
PREPARED 8-29-79



FFG-7 CLASS
PREPARED 6-29-79

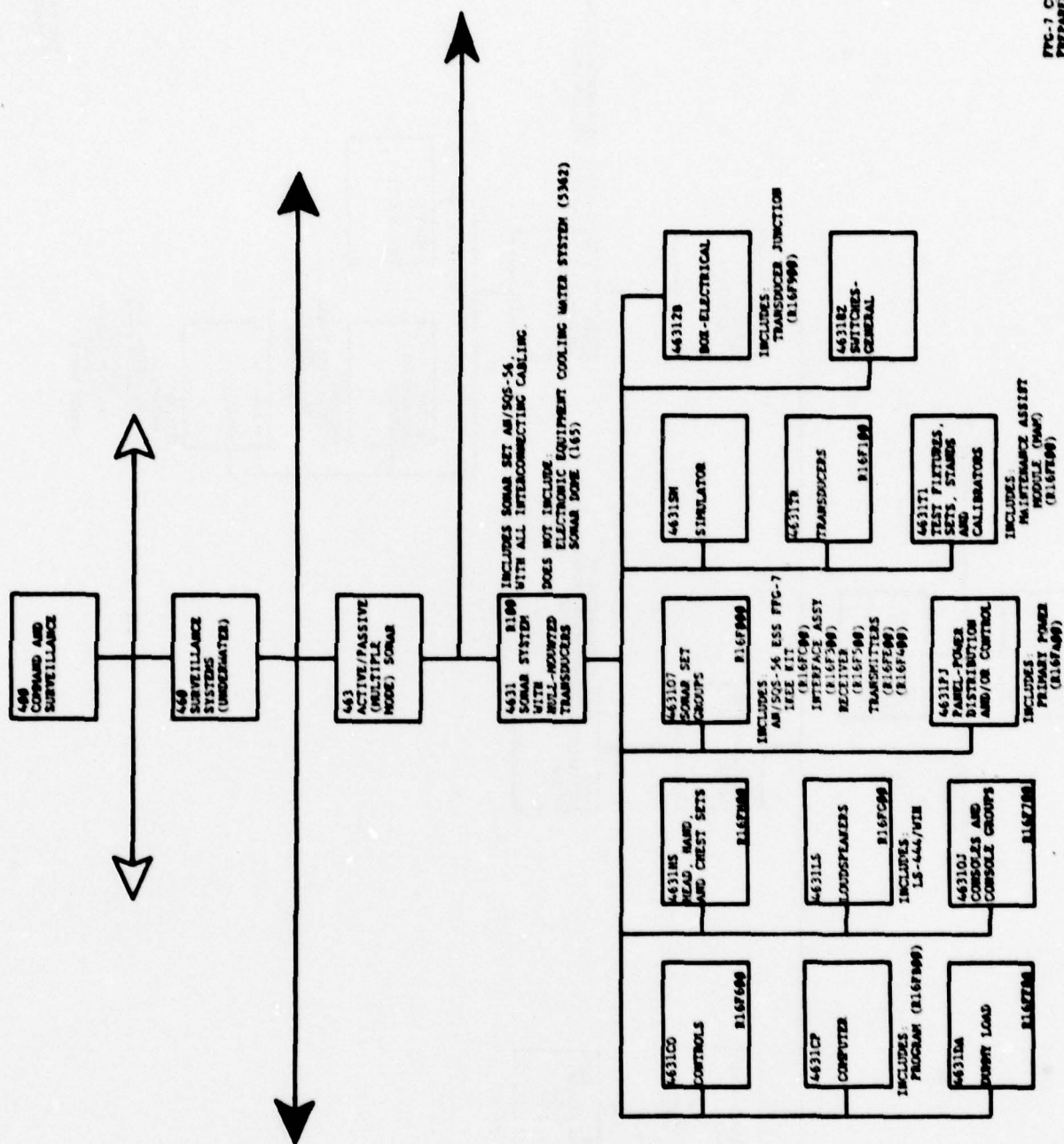
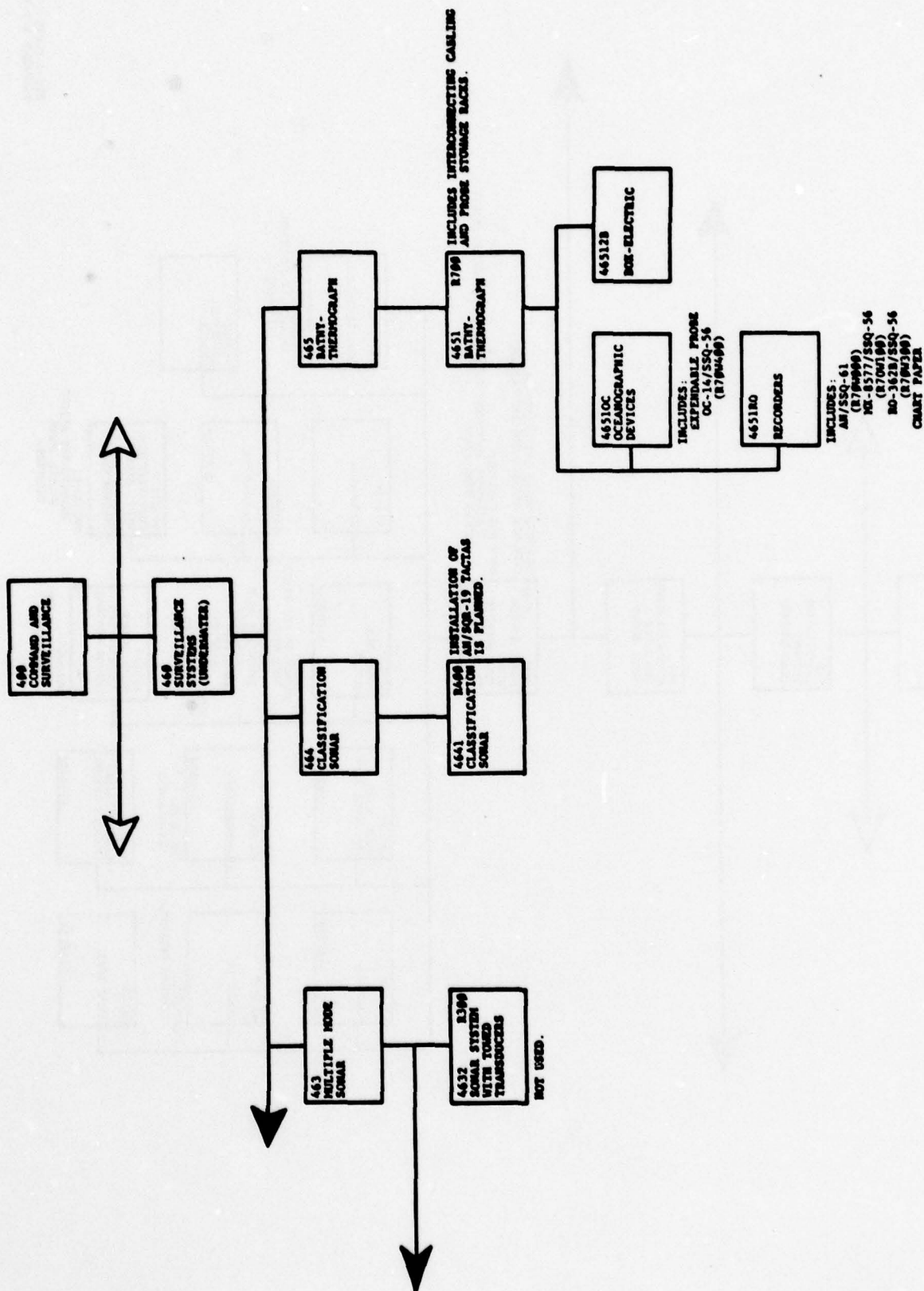


FIG-7 CLASS
PREPARED 3-1-79



PPC-7 CLASS
PREPARED 3-1-79

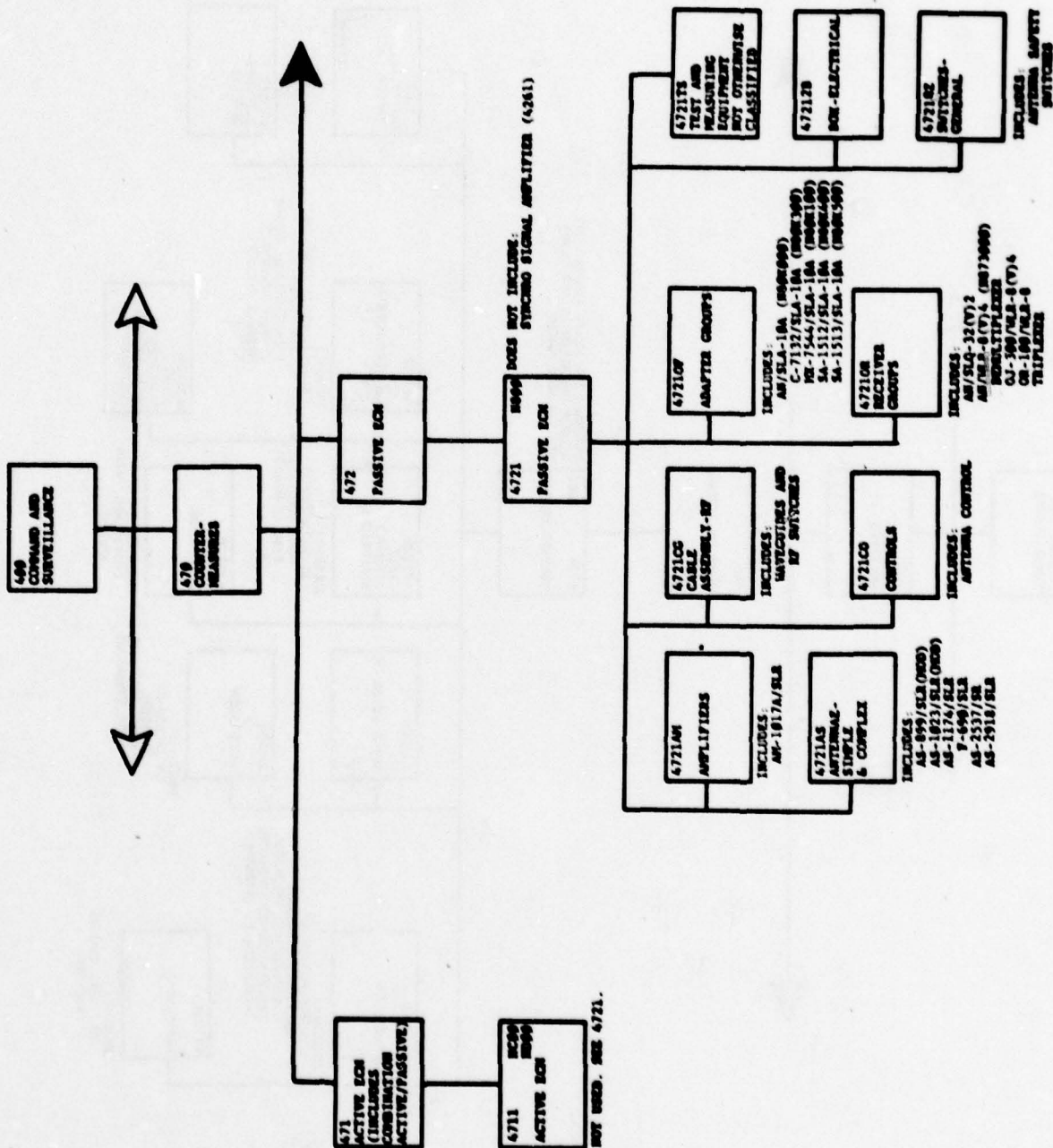


FIG-1 CLASS
PREPARED 6-29-79

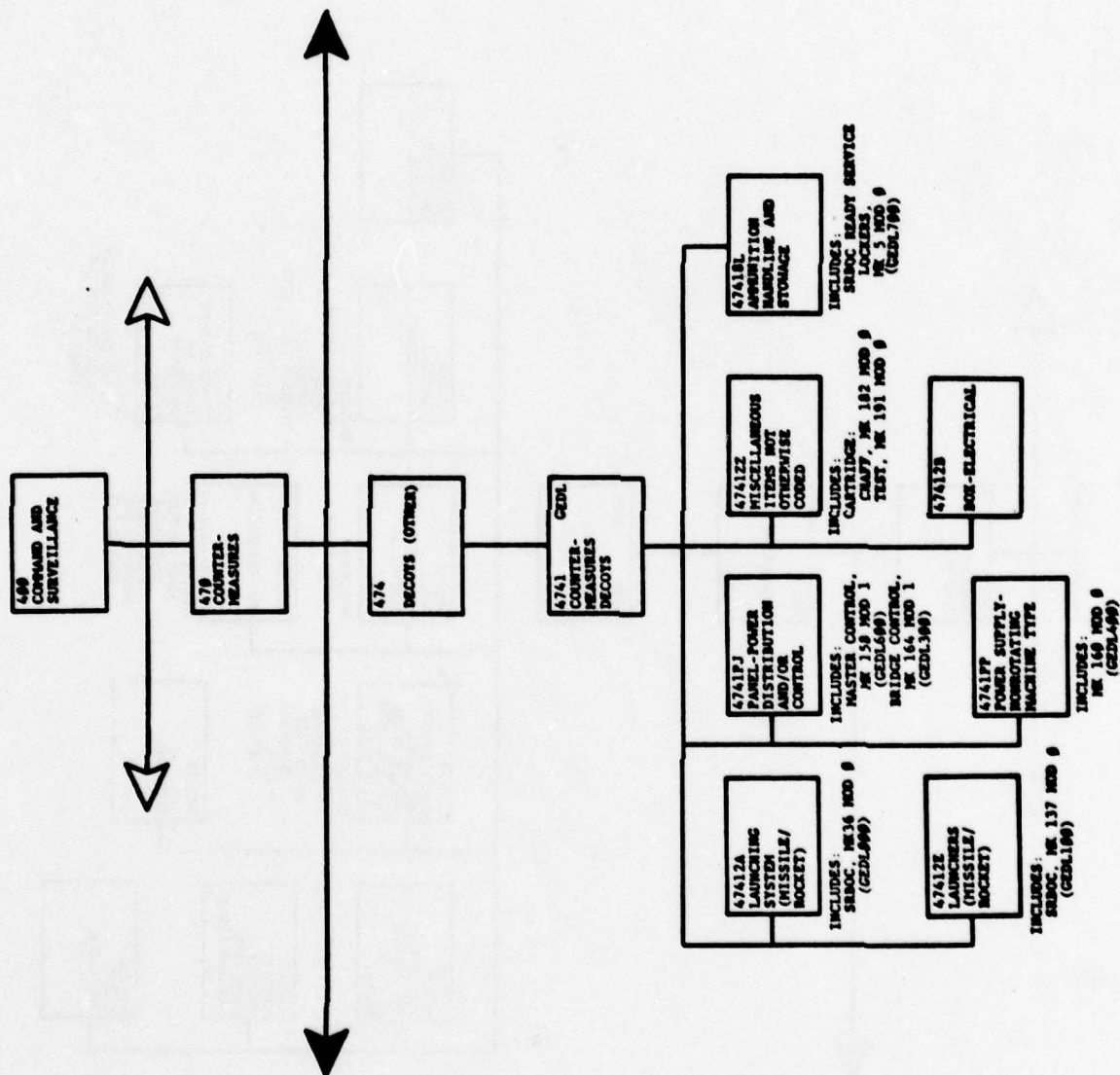
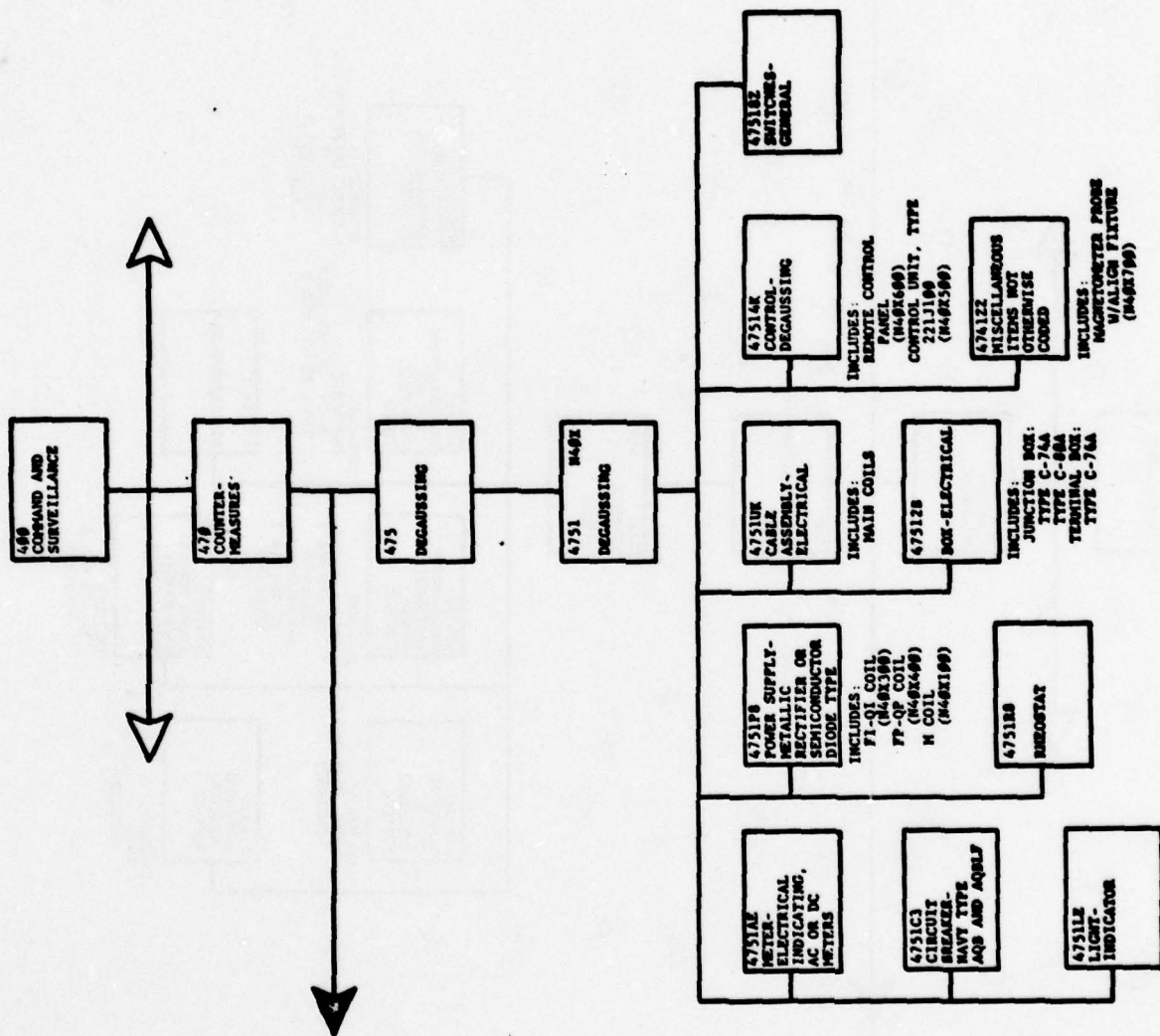
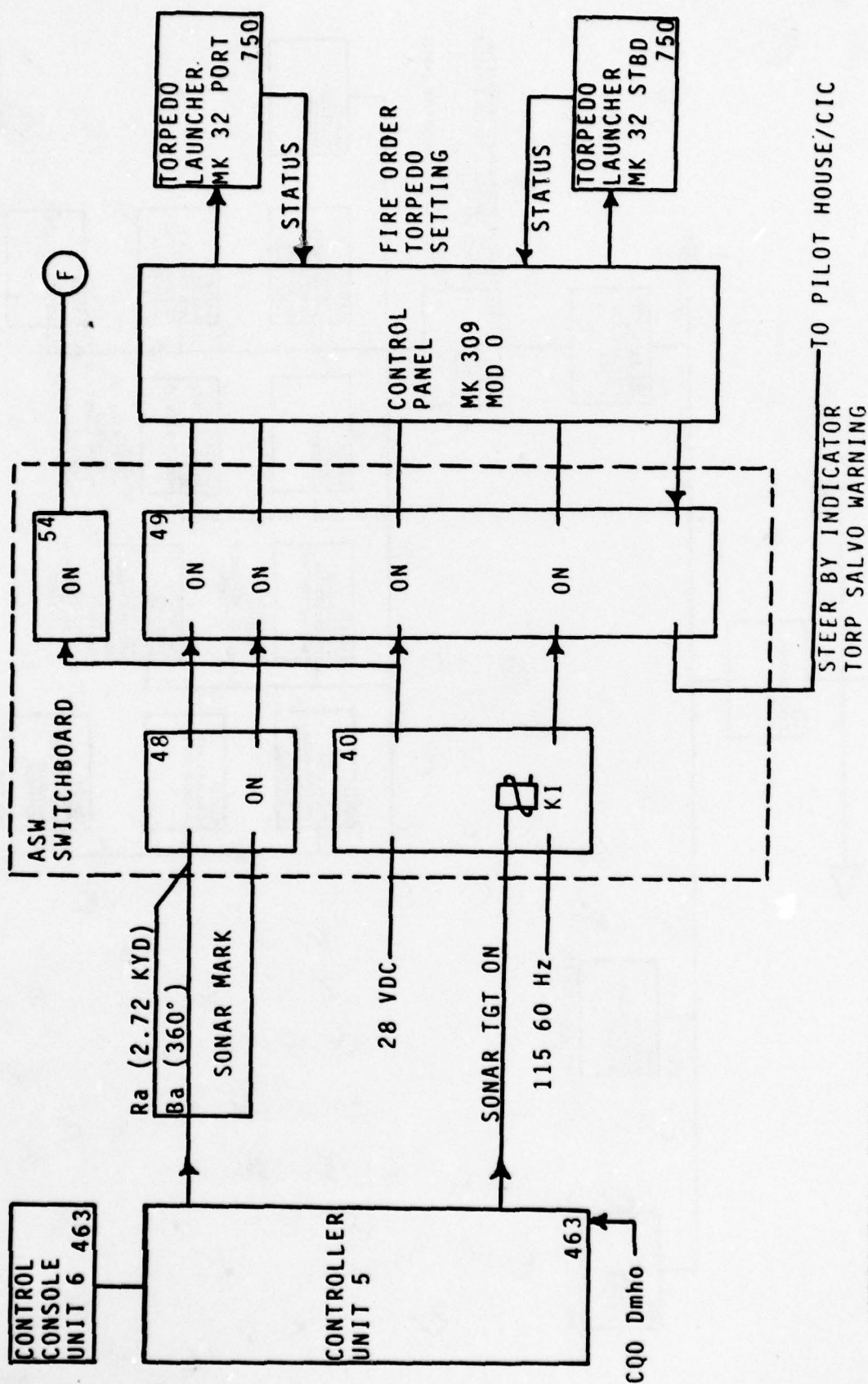


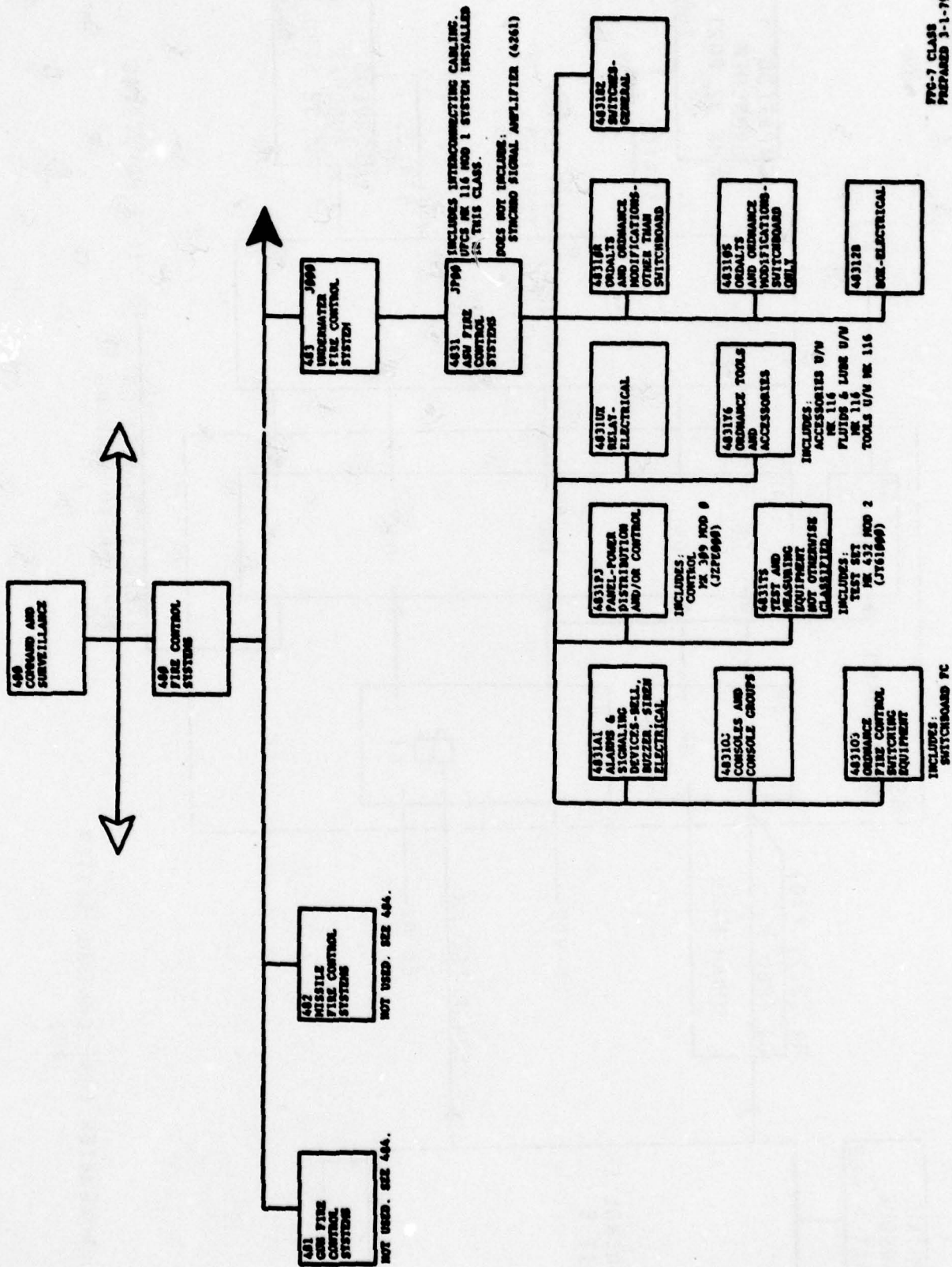
FIG-7 CLASS
PREPARED 3-1-79



770-7 CLASS
PREPARED 6-19-79



UNDERWATER FIRE CONTROL SYSTEM
483



PPG-7 CLASS
PREPARED 3-1-79



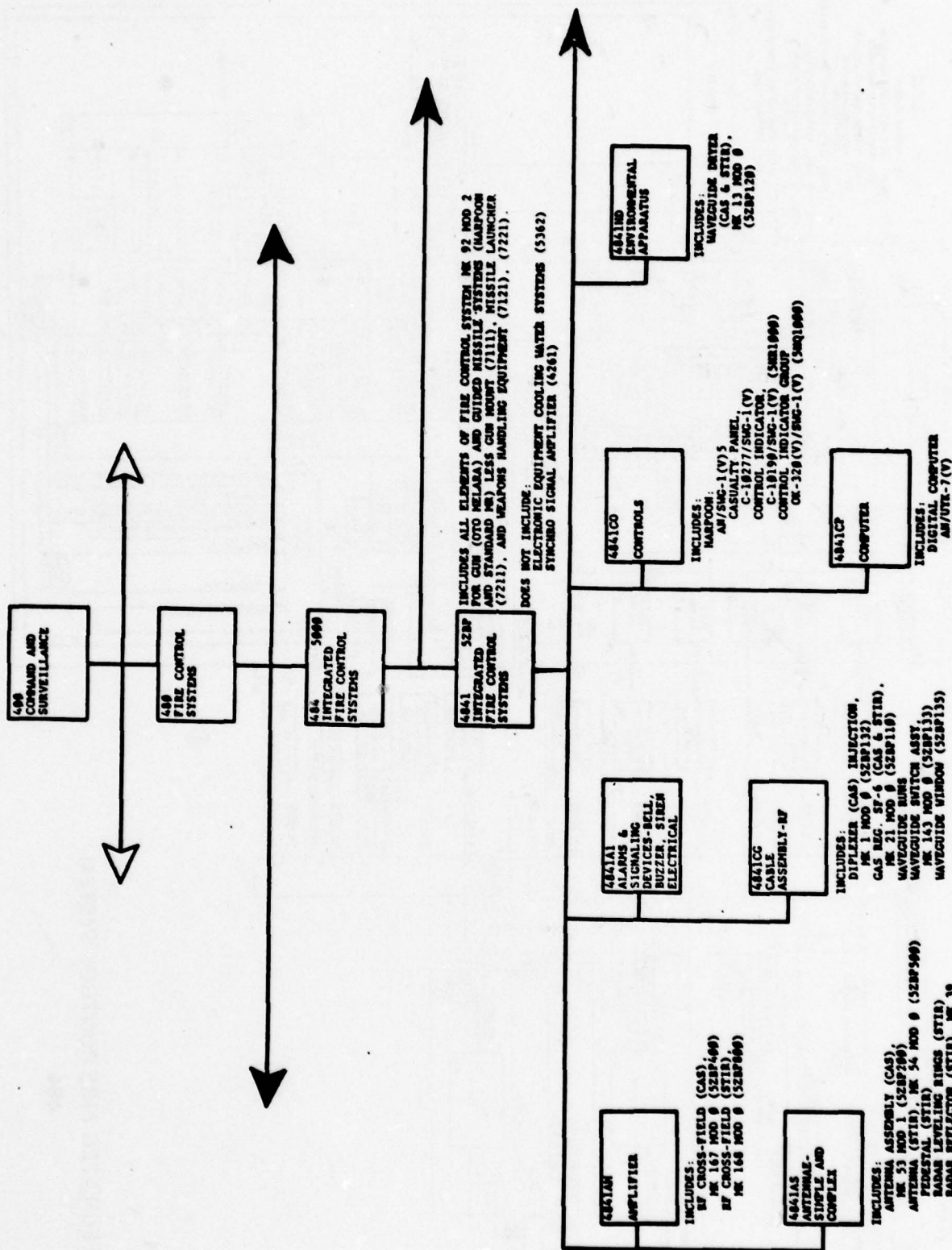
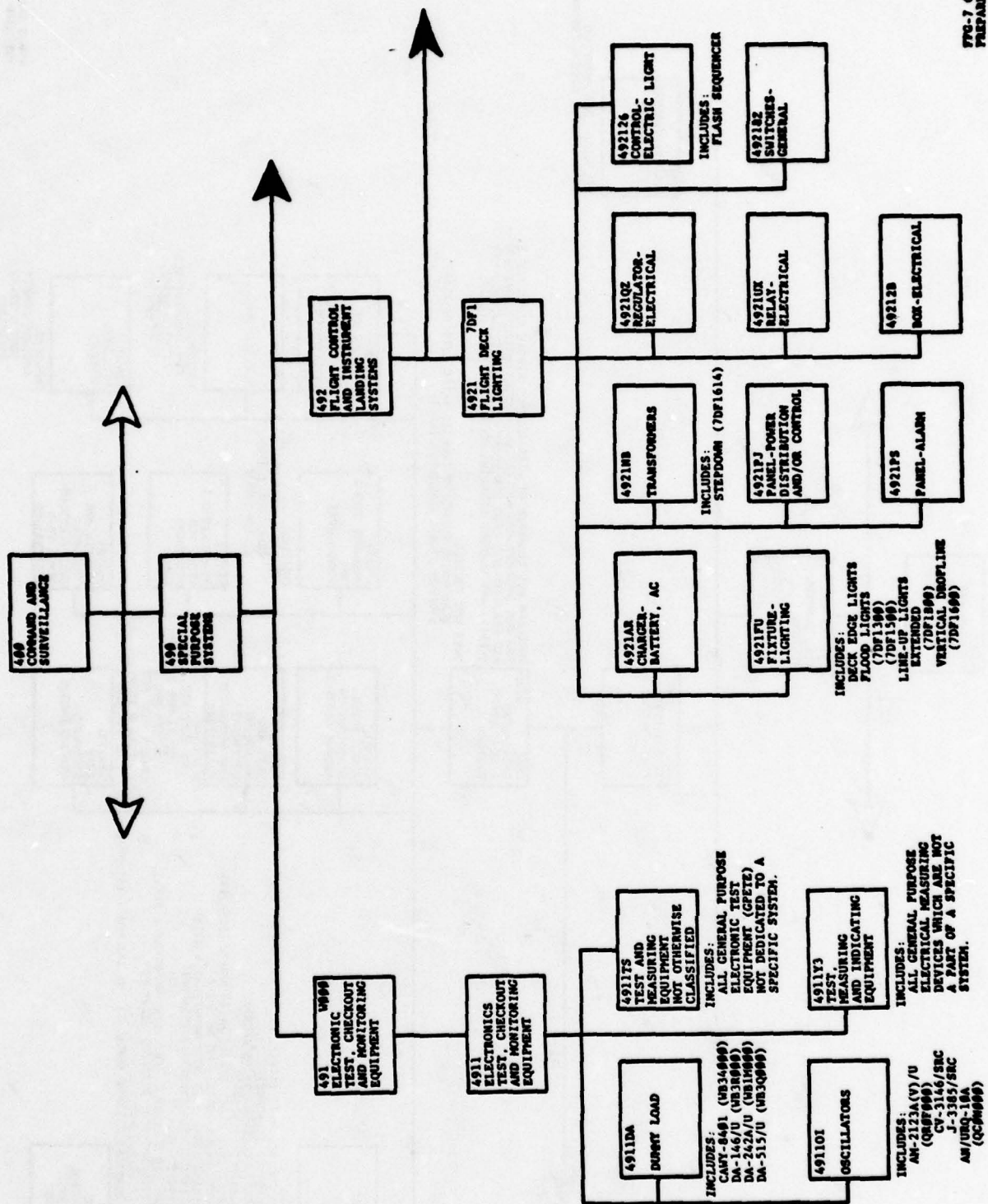
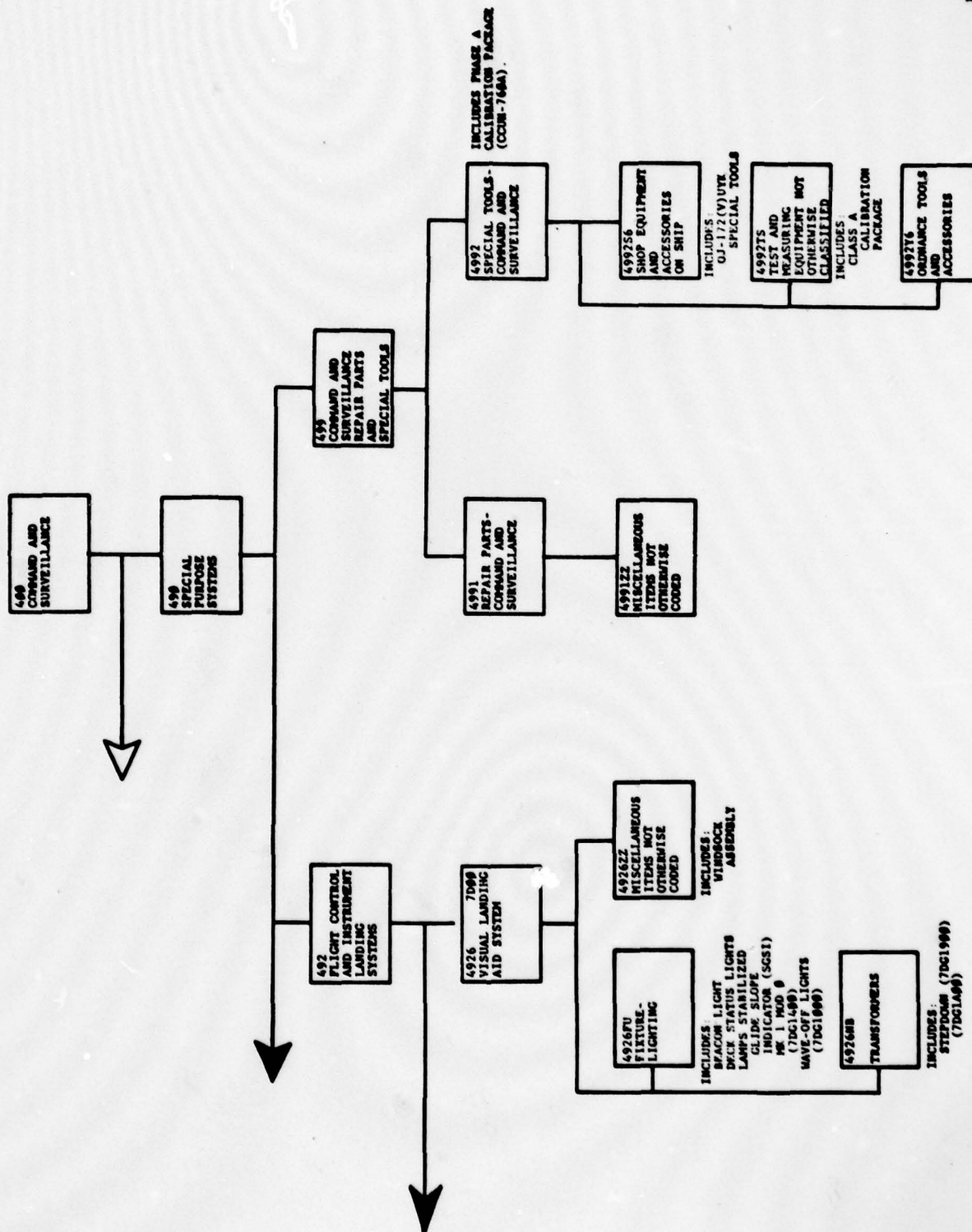


FIG-1 CLASS
PREPARED 6-29-79



770-7 CLASS
PREPARED 3-1-79



PPG-7 CLASS
PREPARED 3-1-79

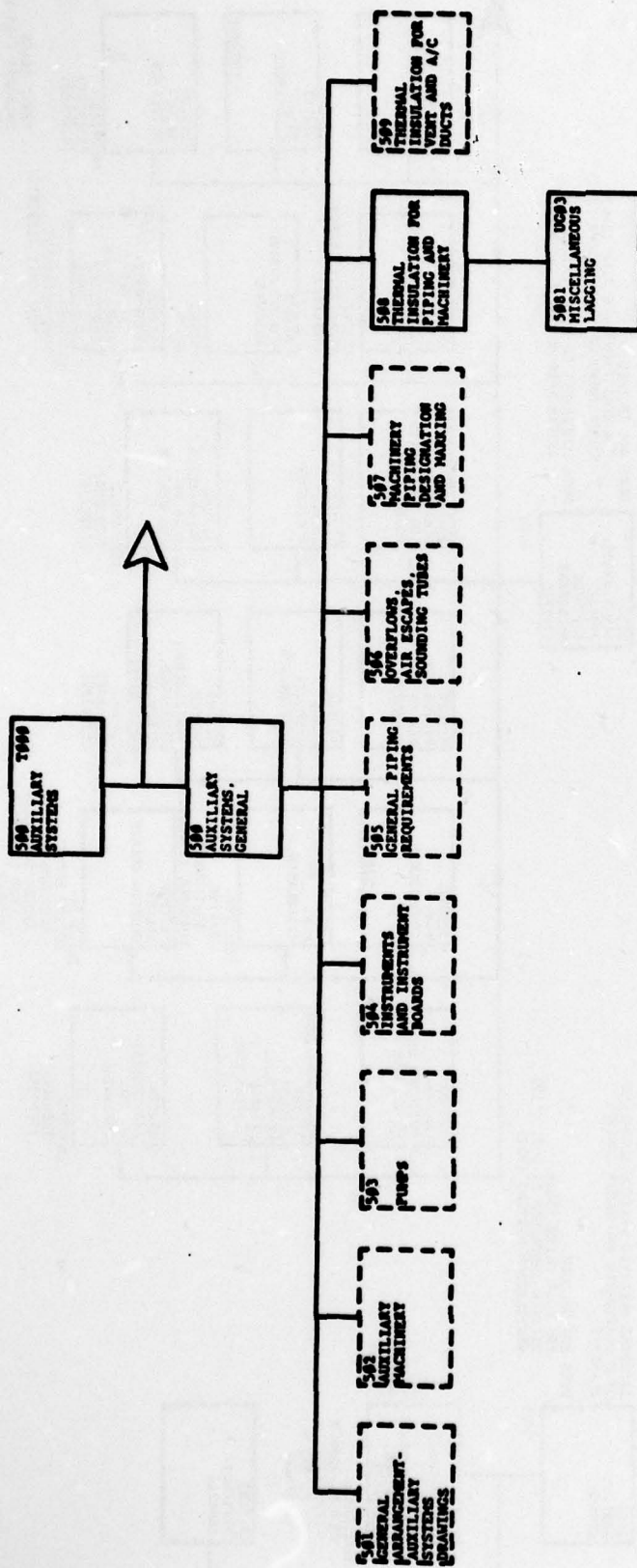
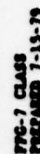
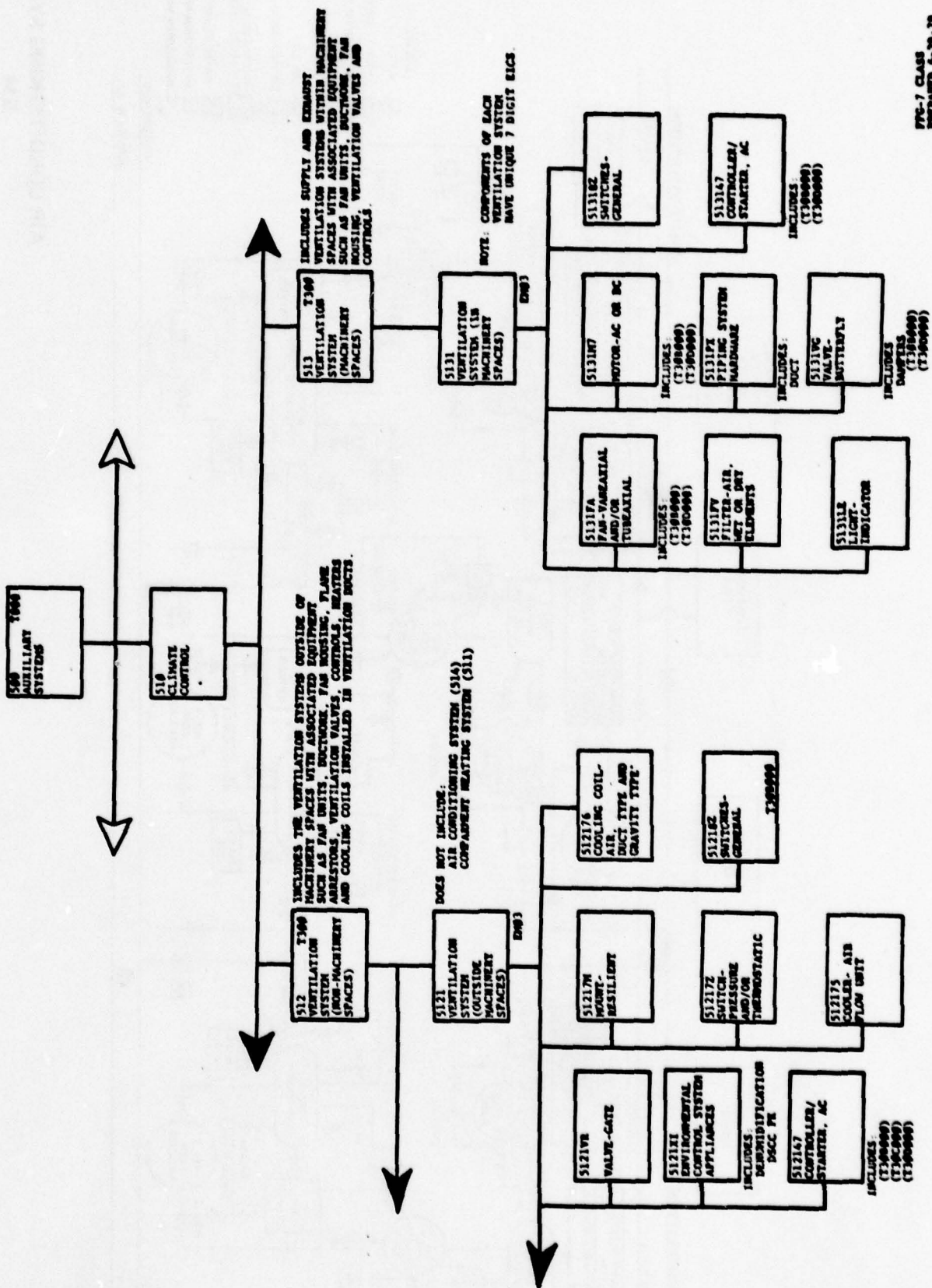
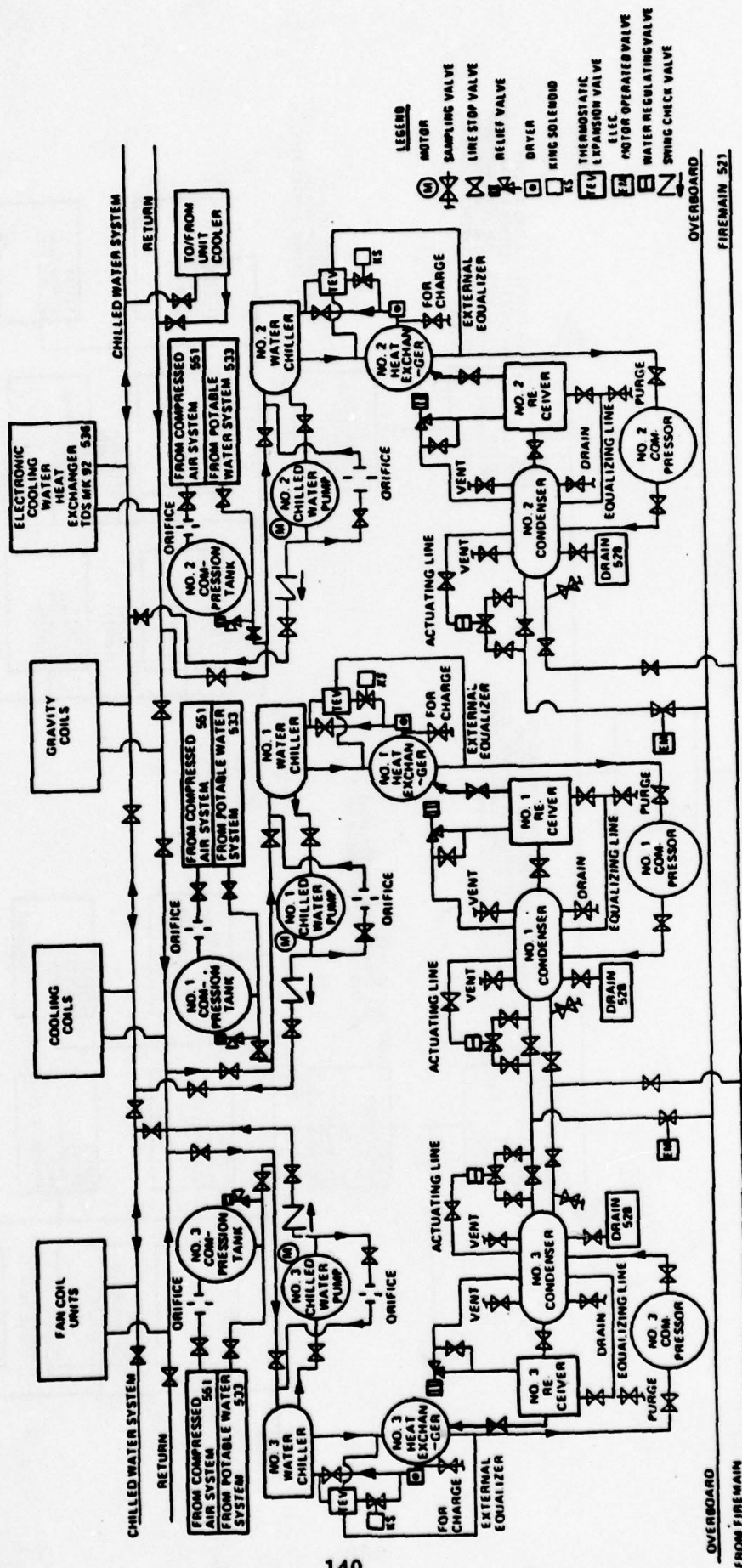


FIG-7 CLASS
PREPARED 3-1-79



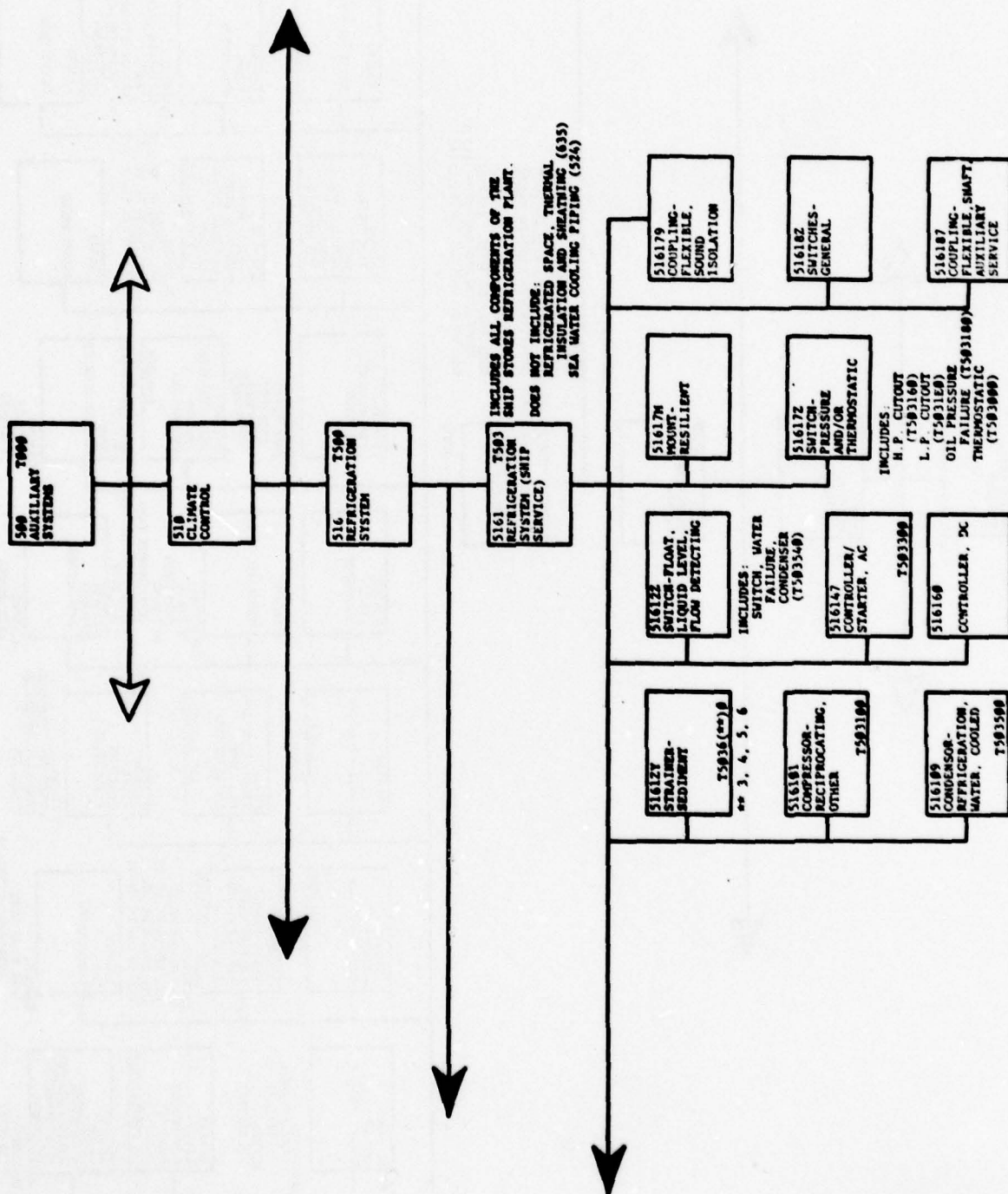


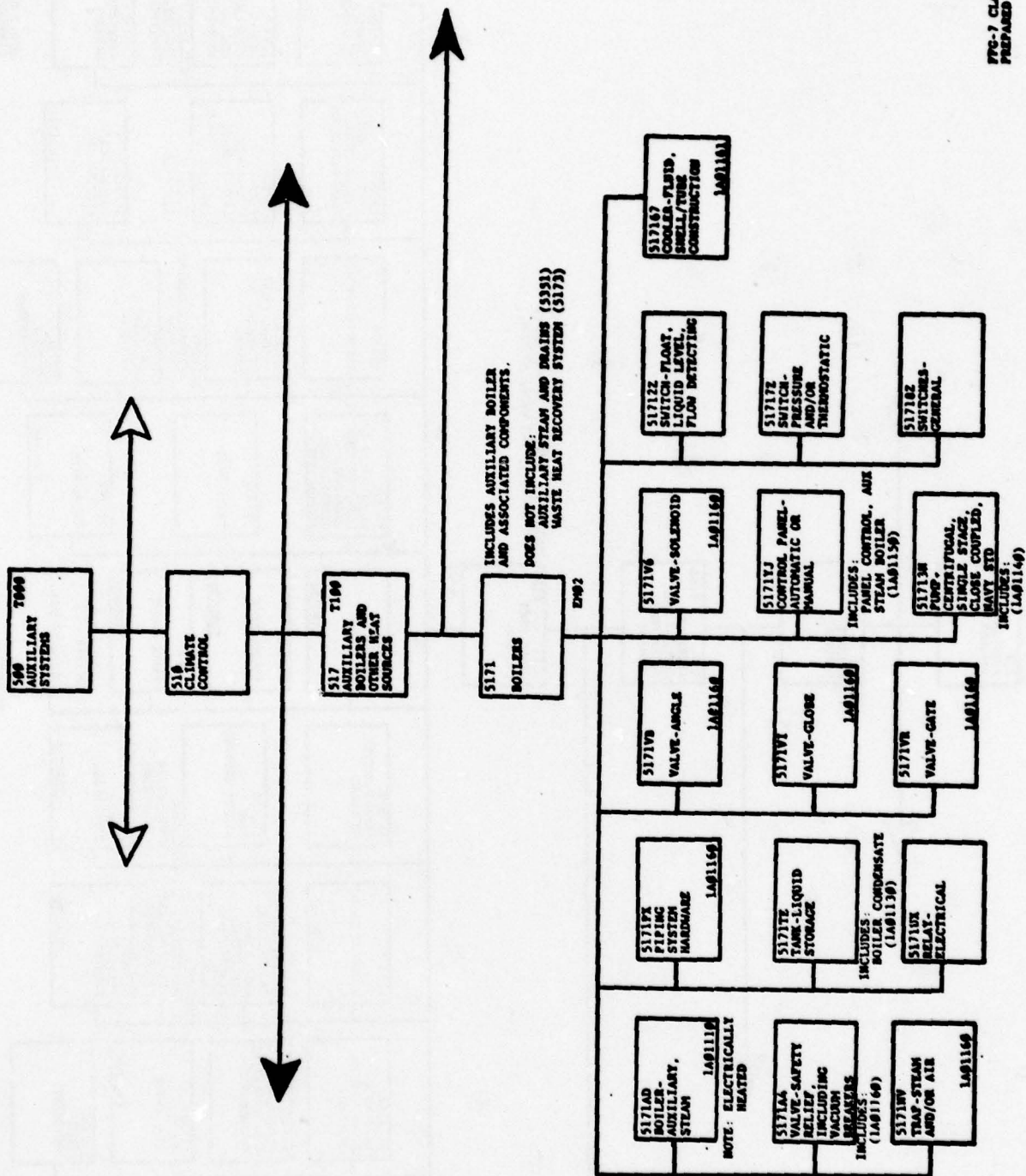
PPC-7 CLASS
PREPARED 6-29-79

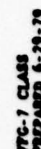












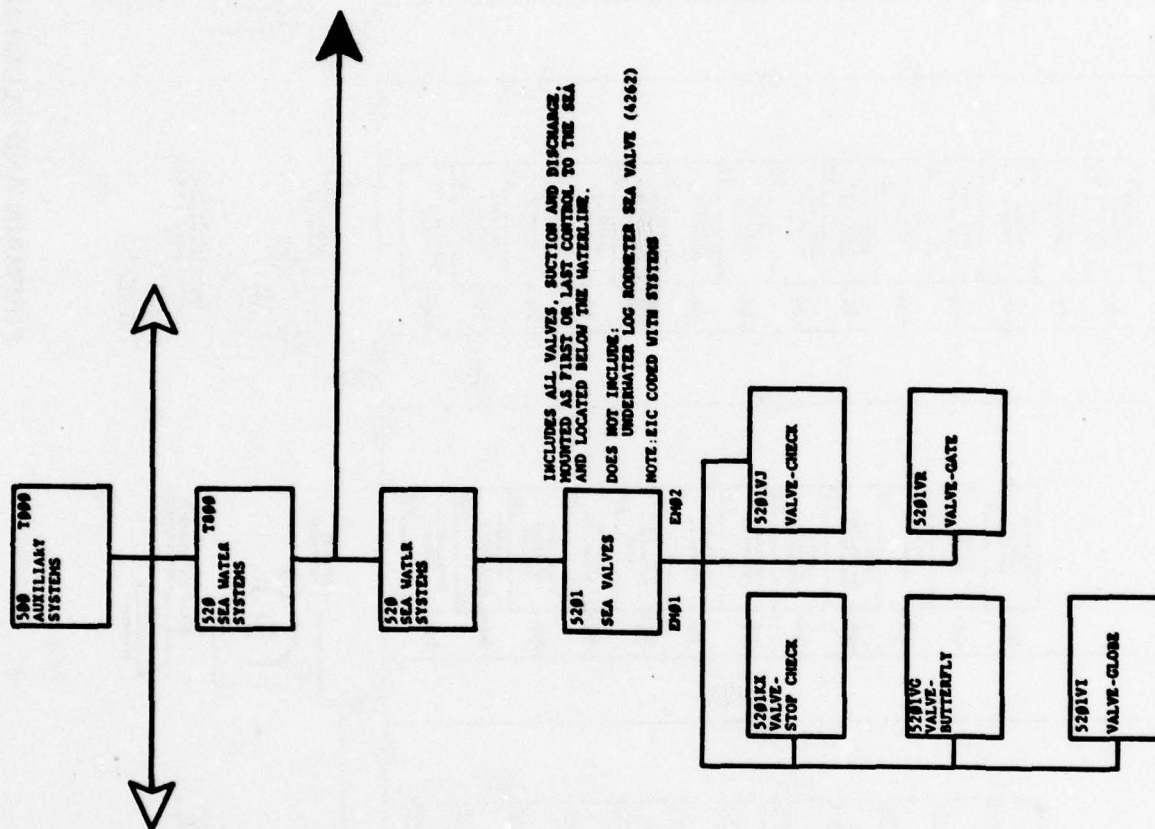


FIG-7 CLASS
PREPARED 8-29-79

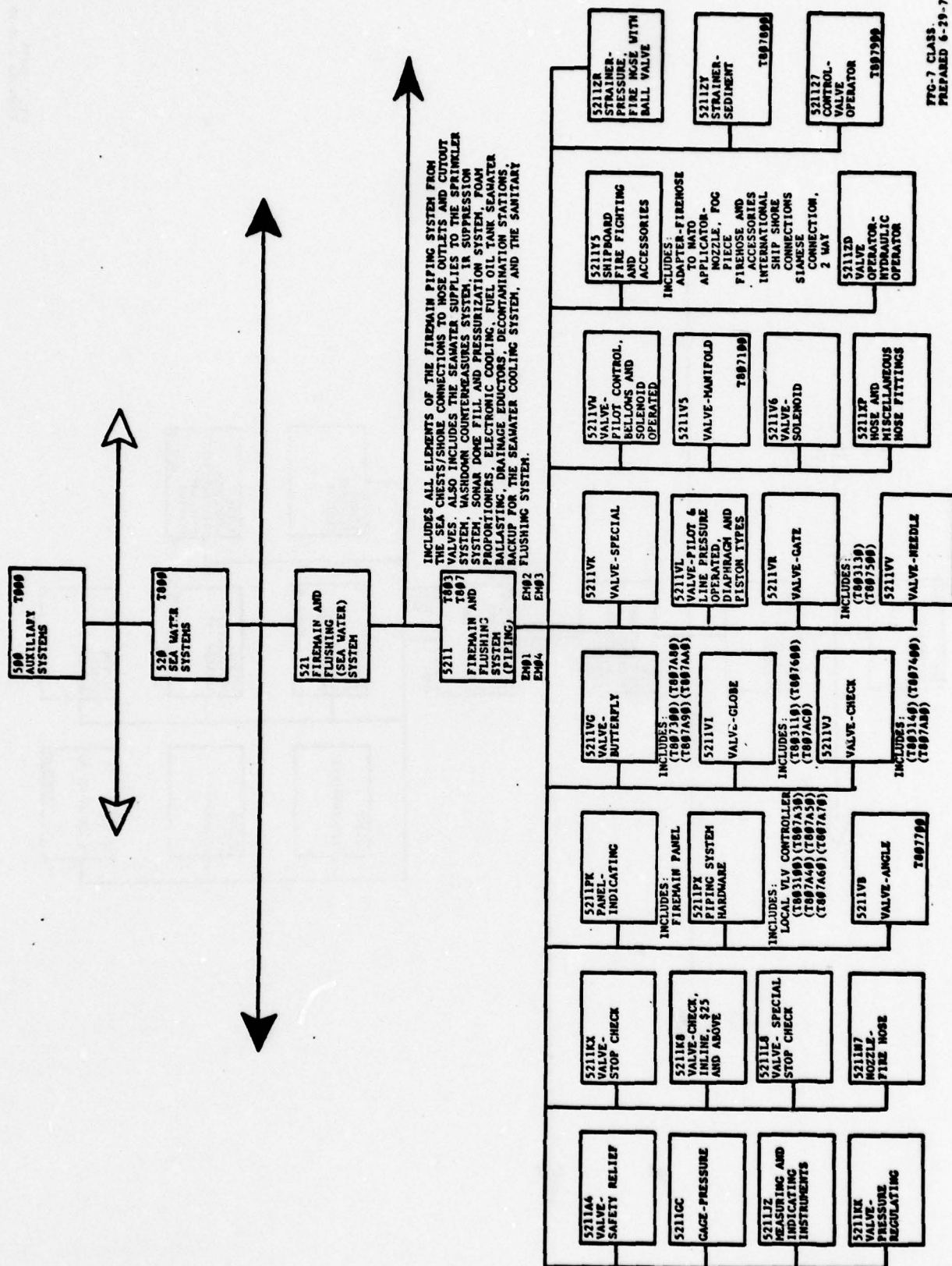
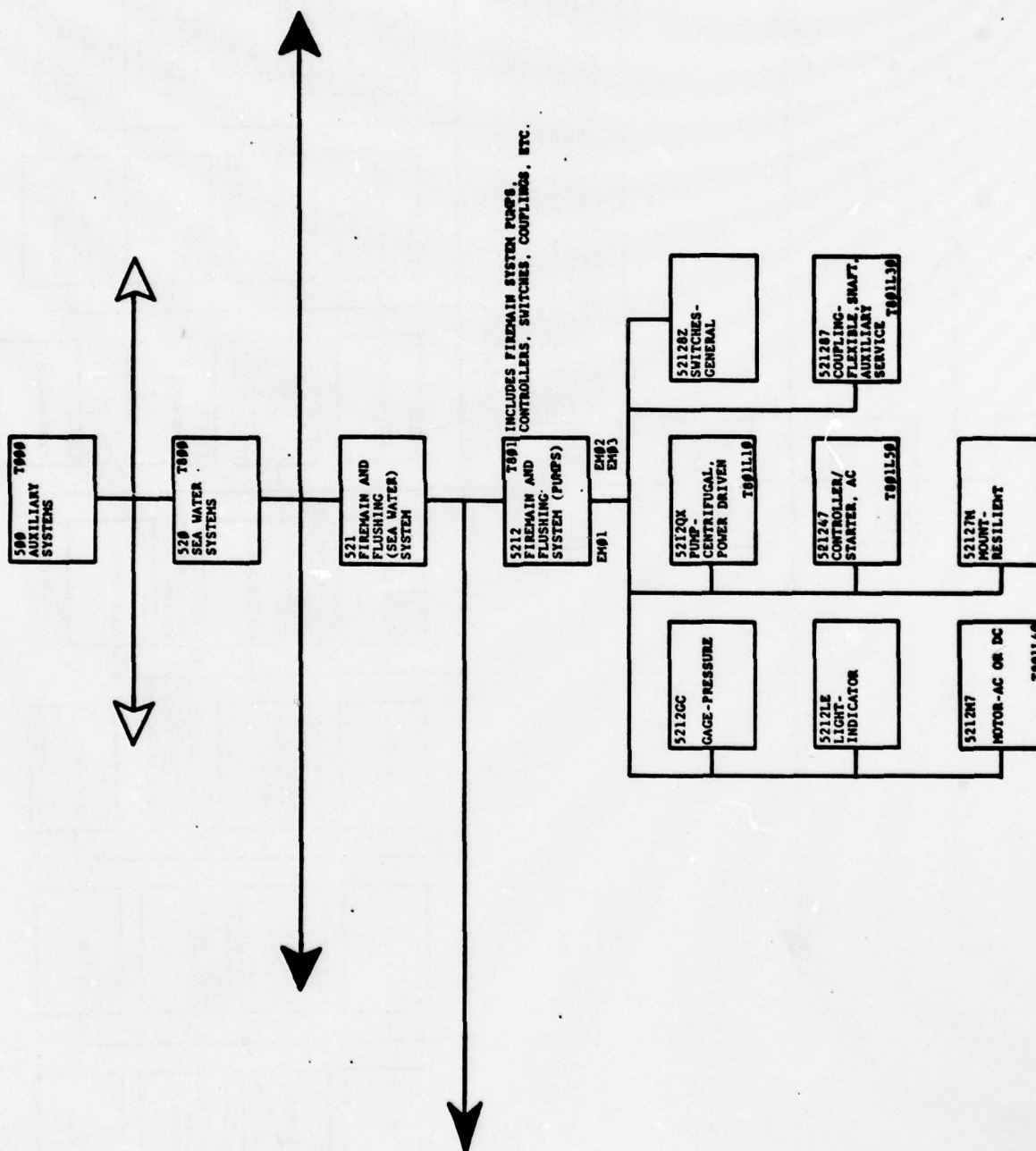
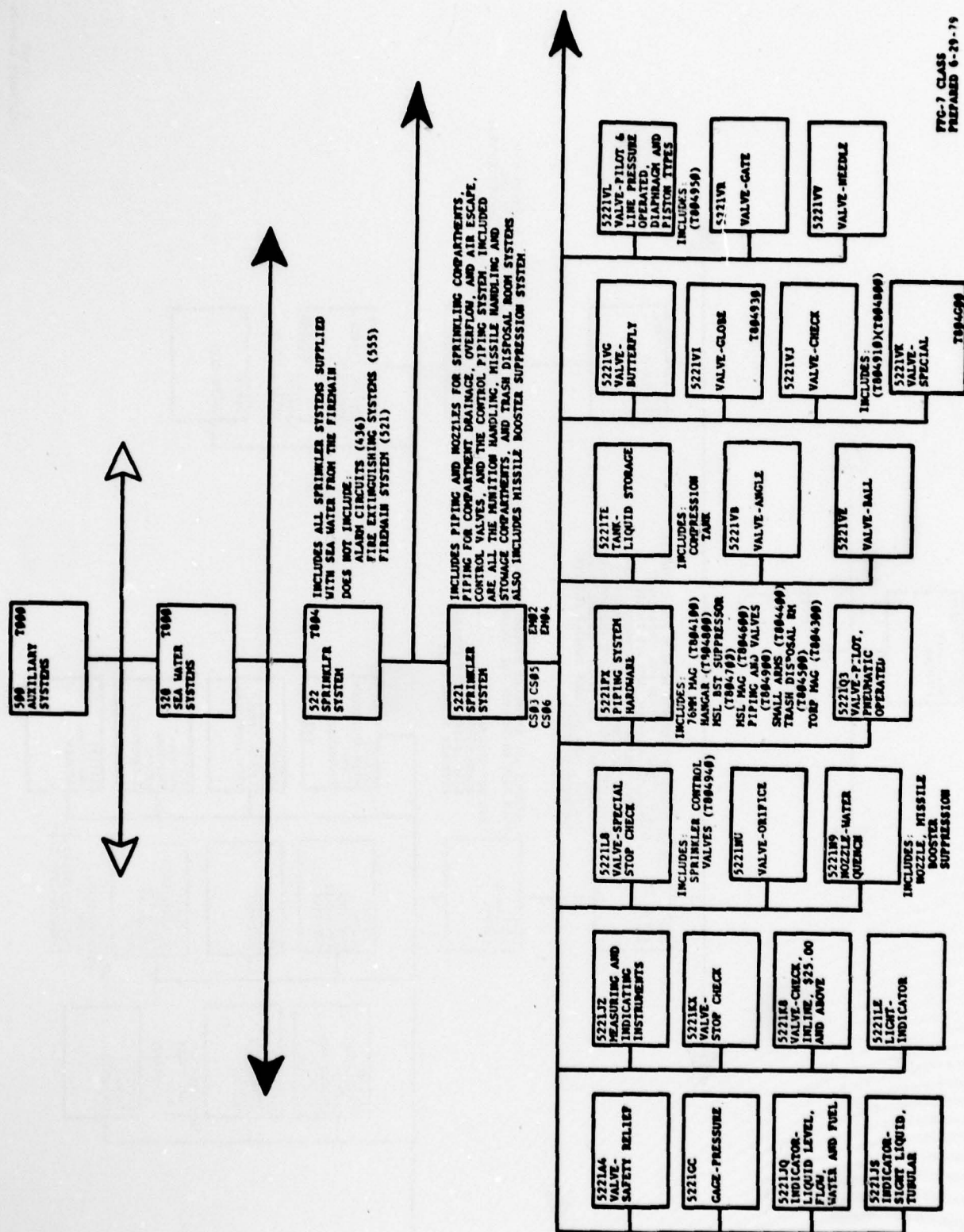
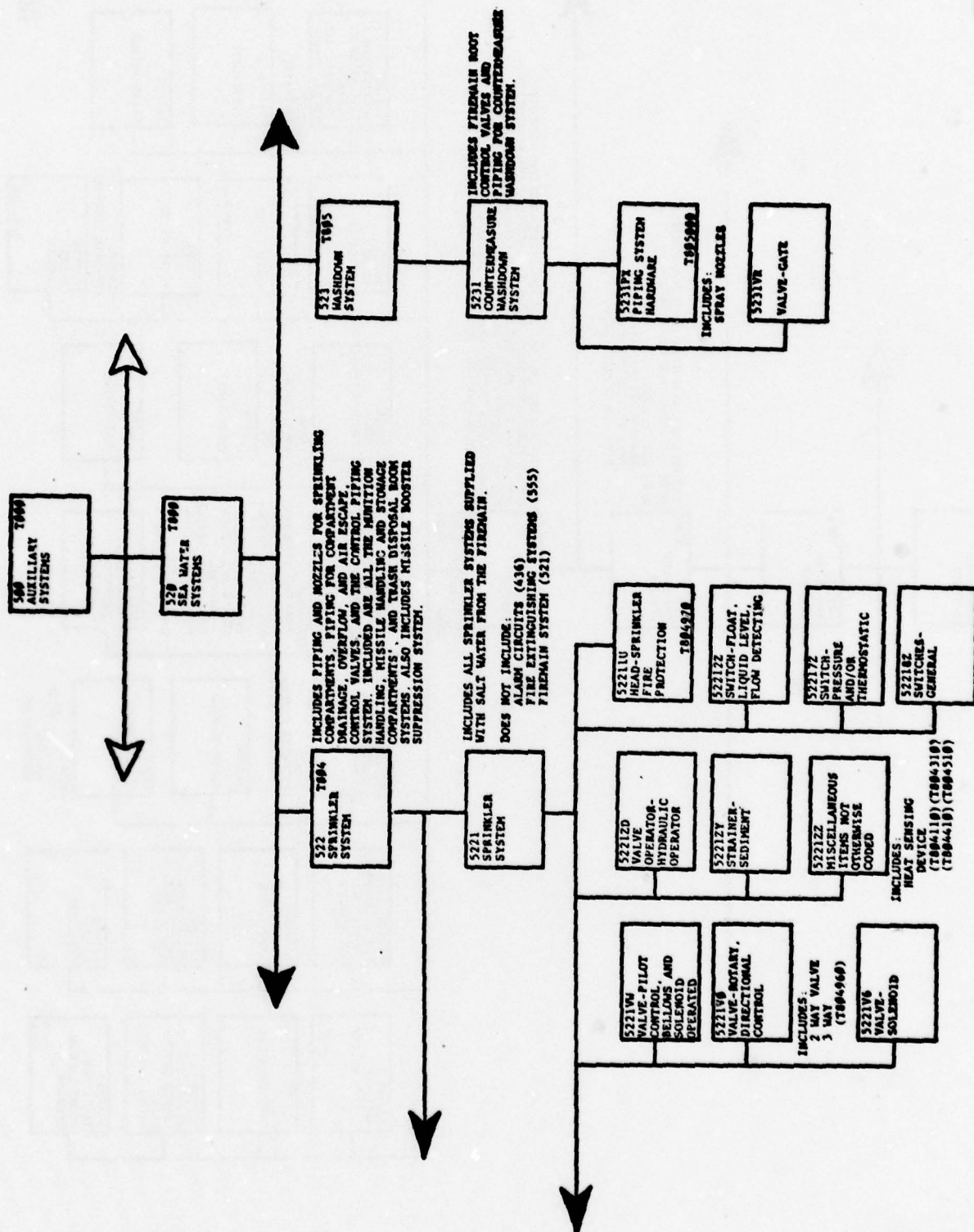


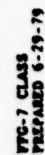
FIG-7 CLASS
PREPARED 6-29-79

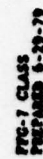


FTC-7 CLASS
PREPARED 6-29-79



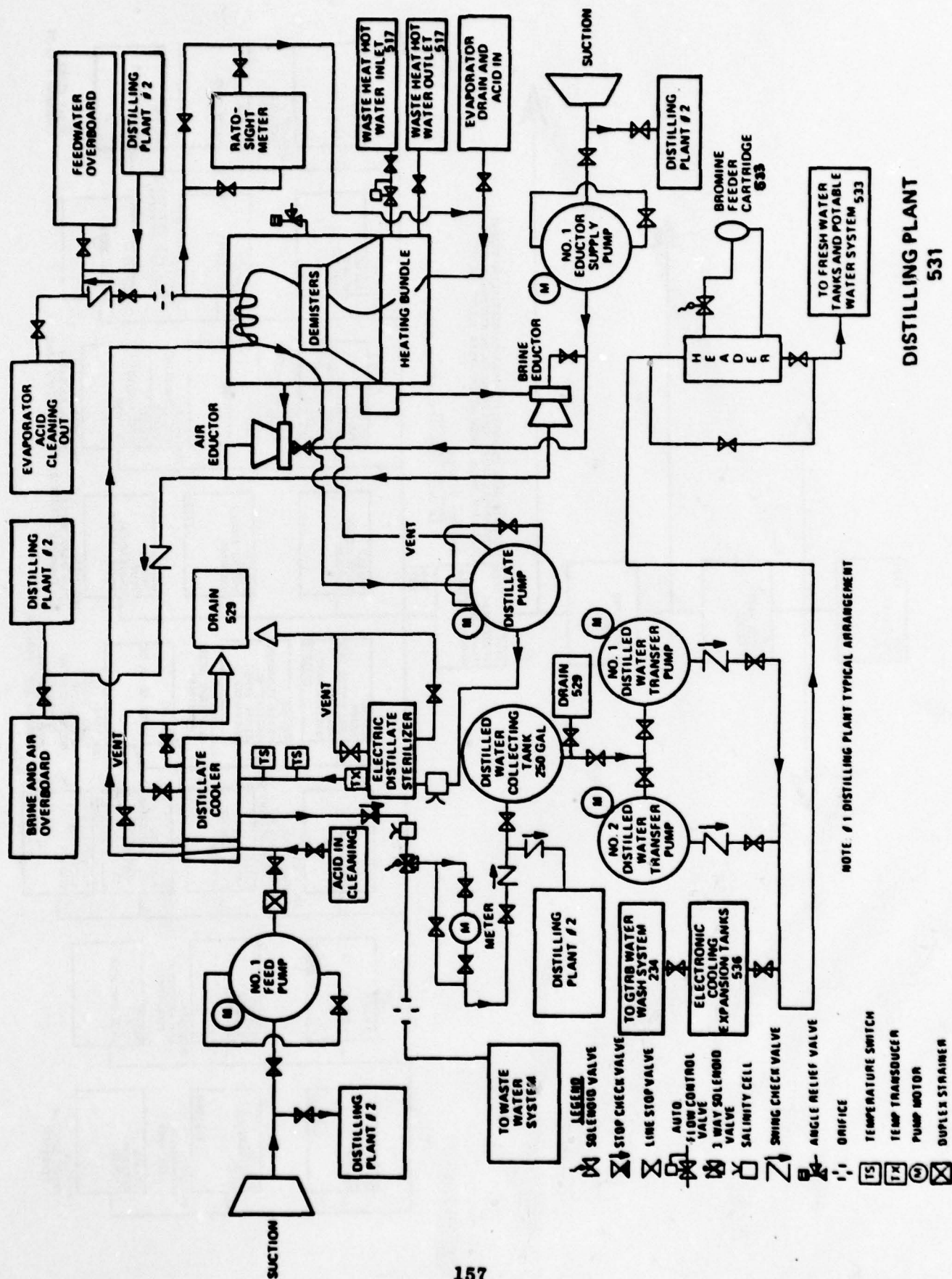




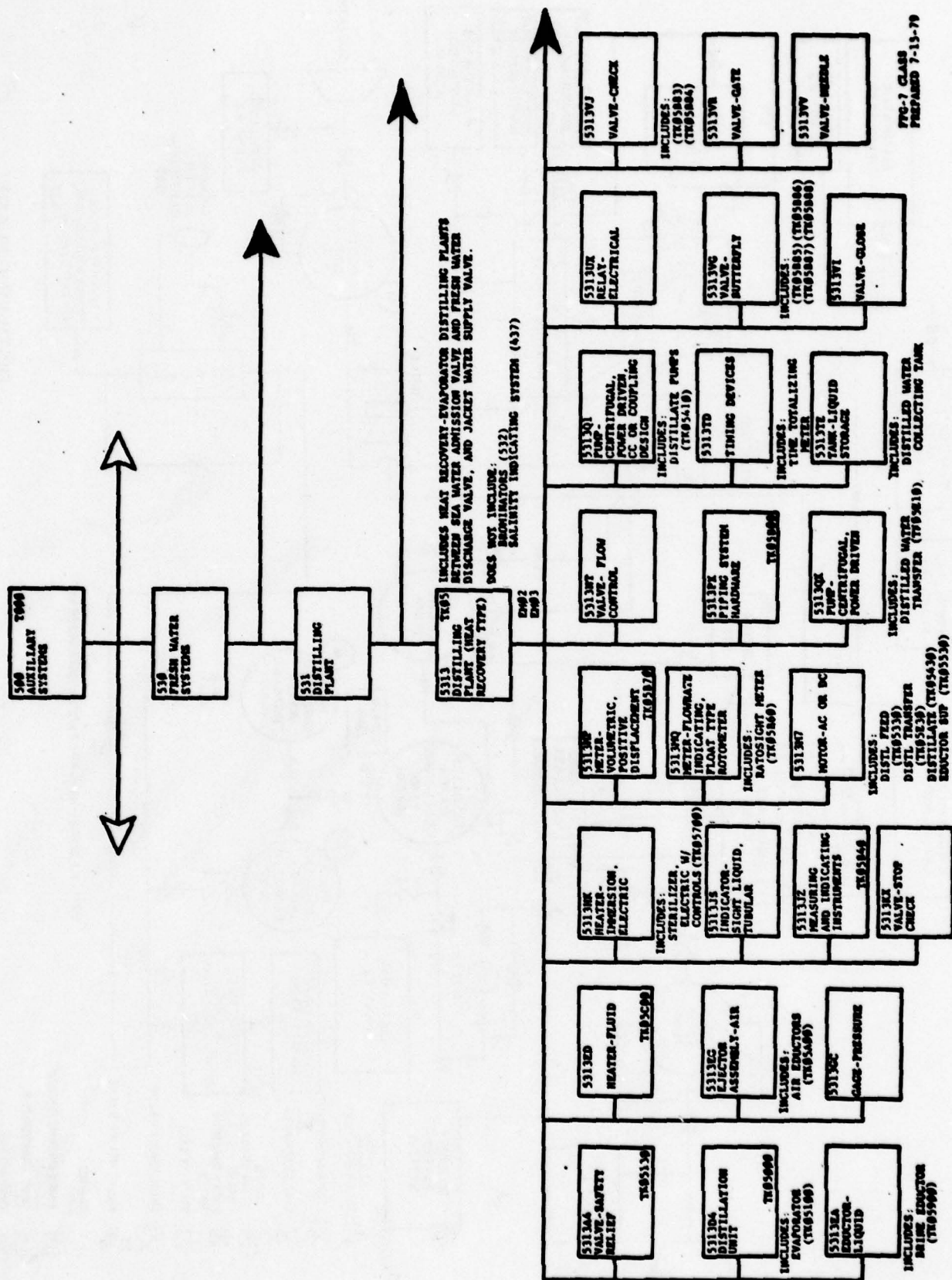






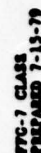


DISTILLING PLANT
531

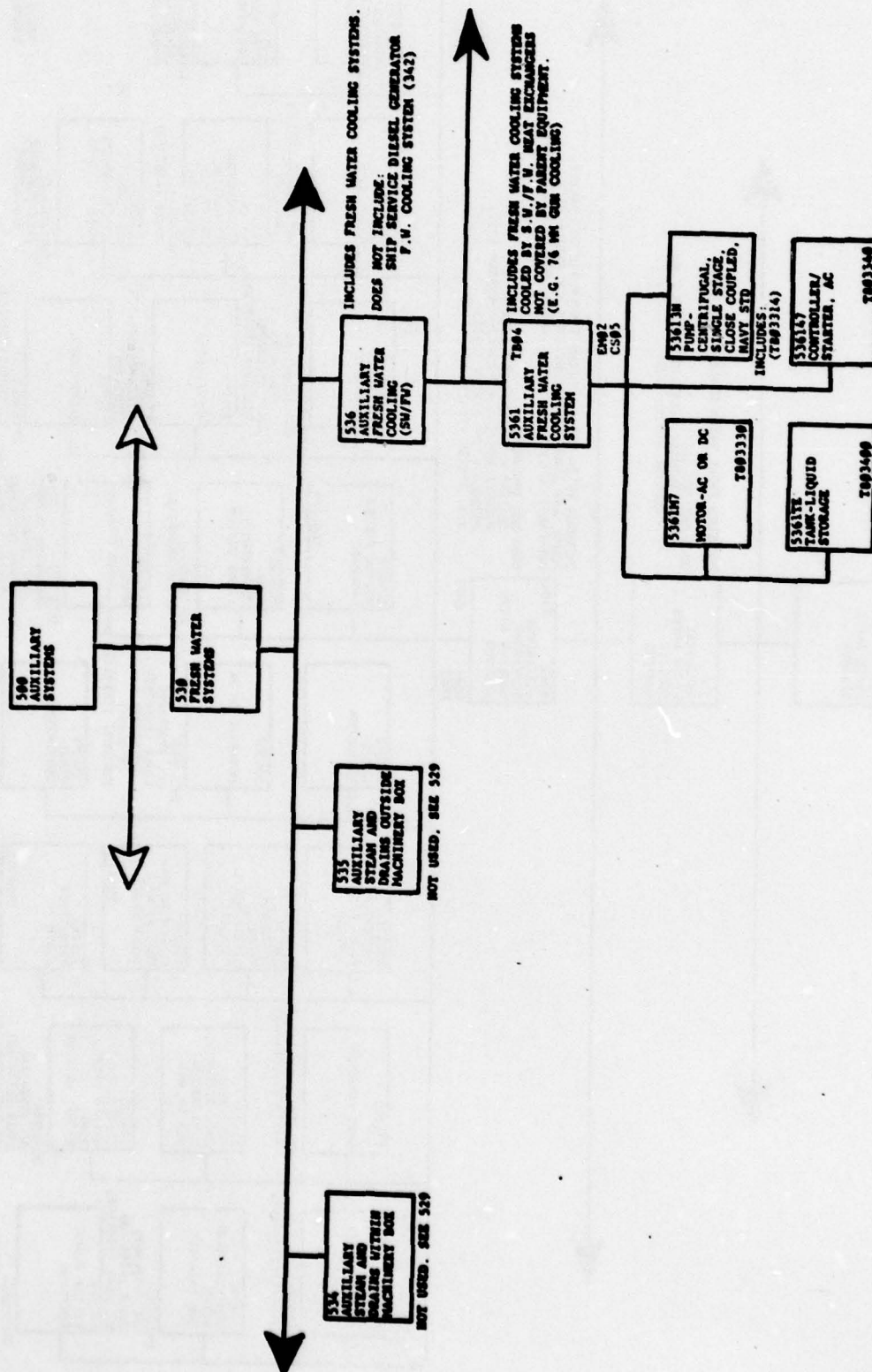


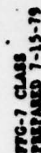
FFG-7 CLASS
 PREPARED 7-13-79

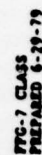




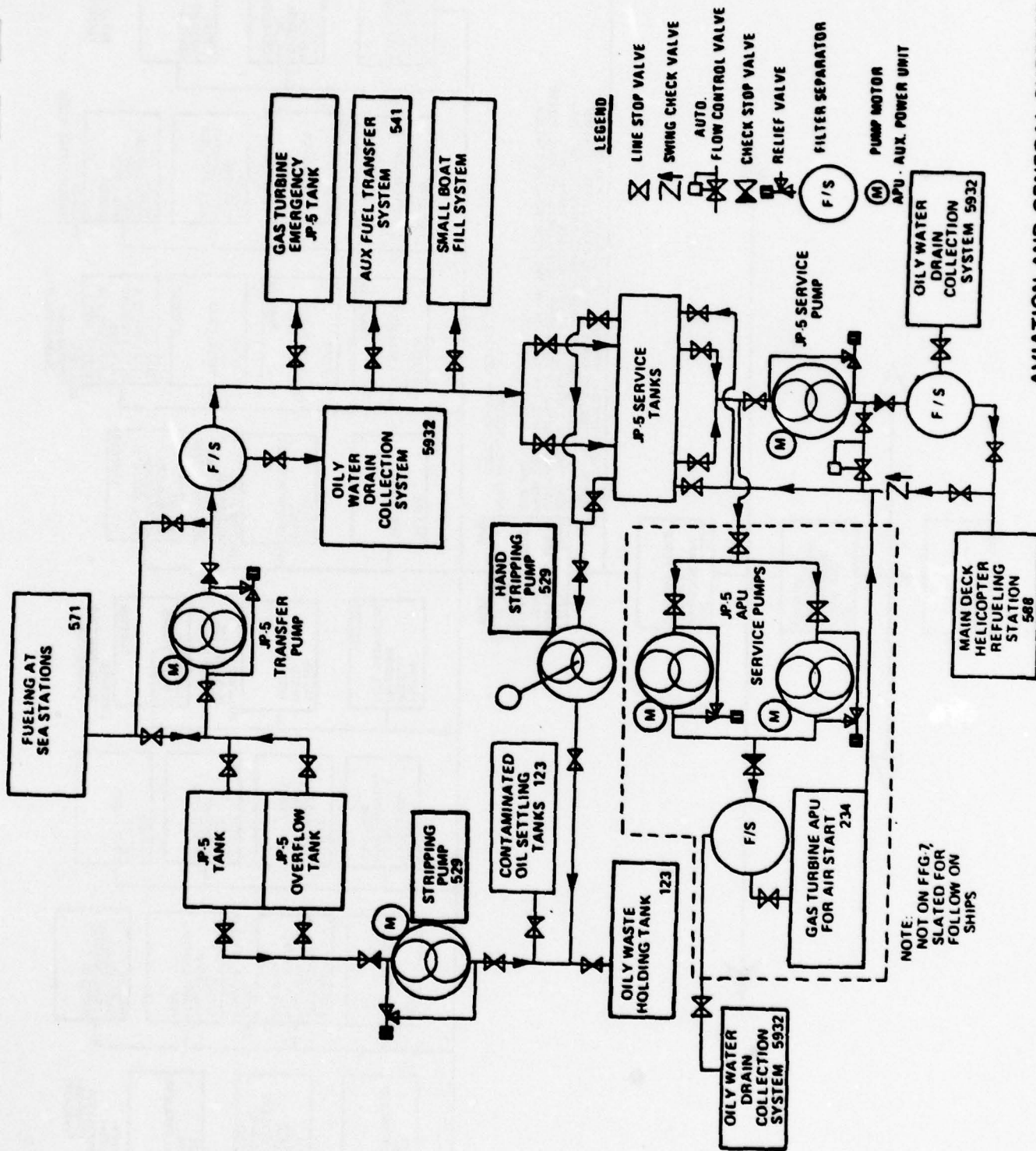




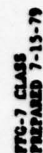


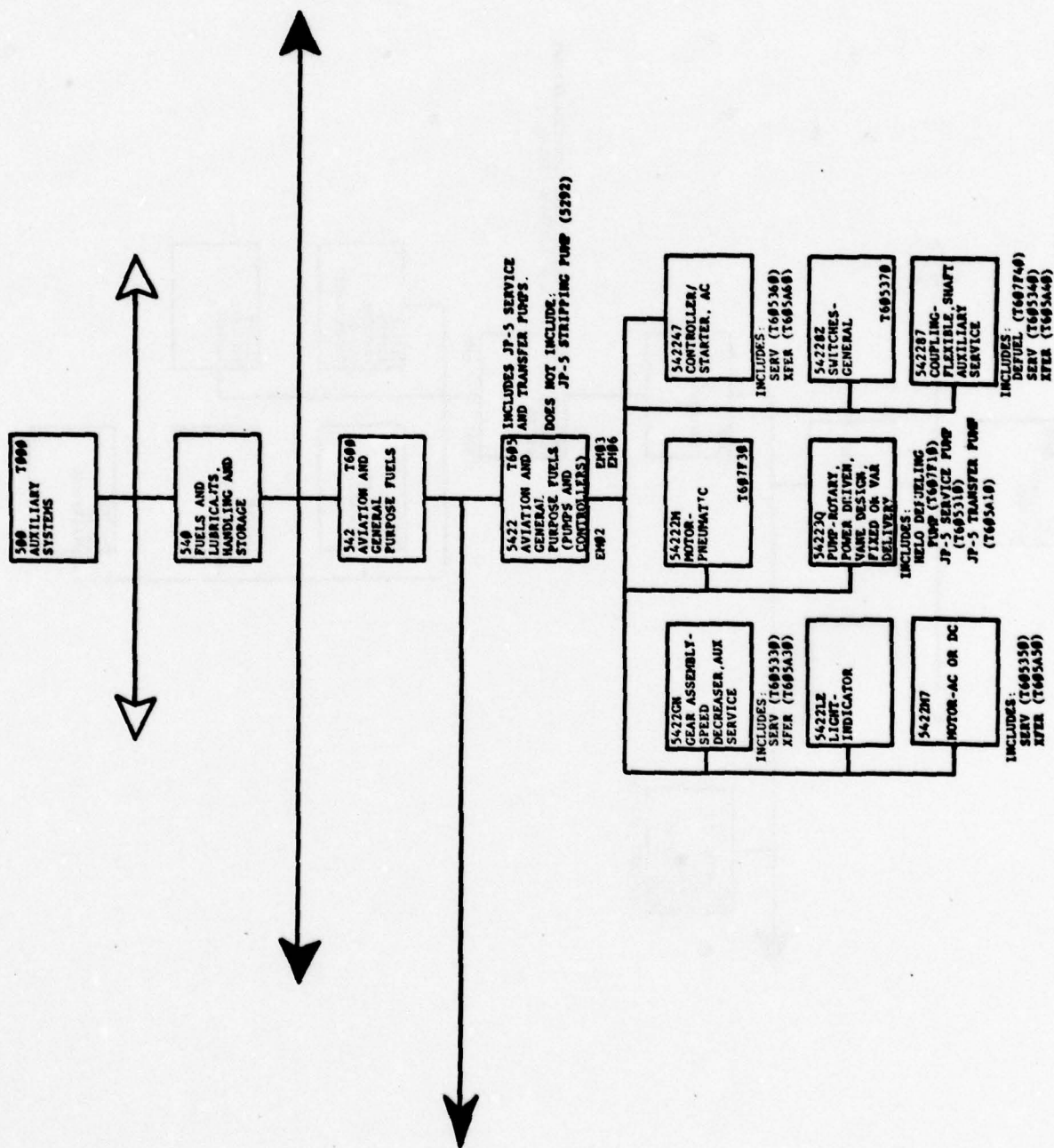


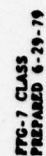


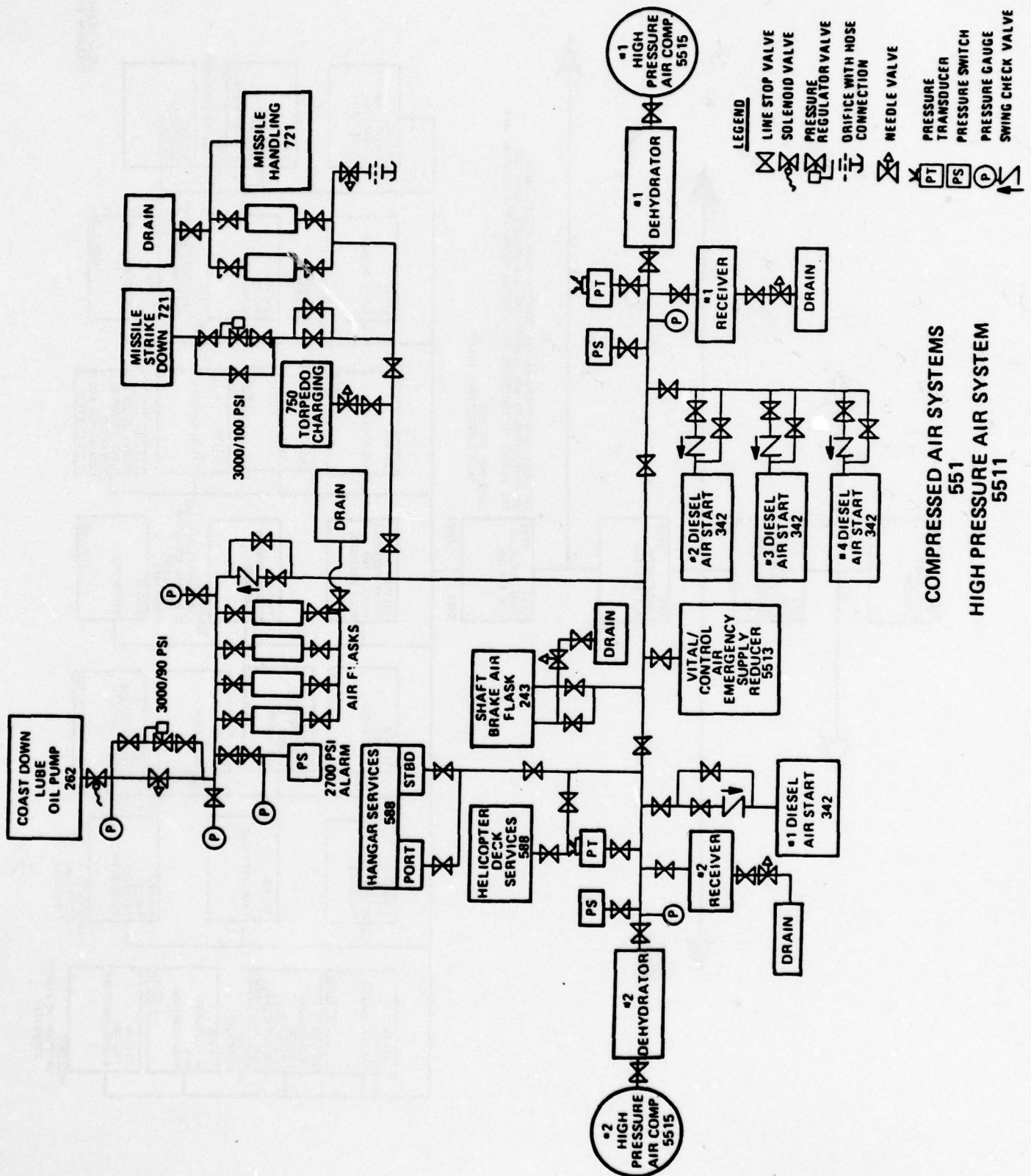


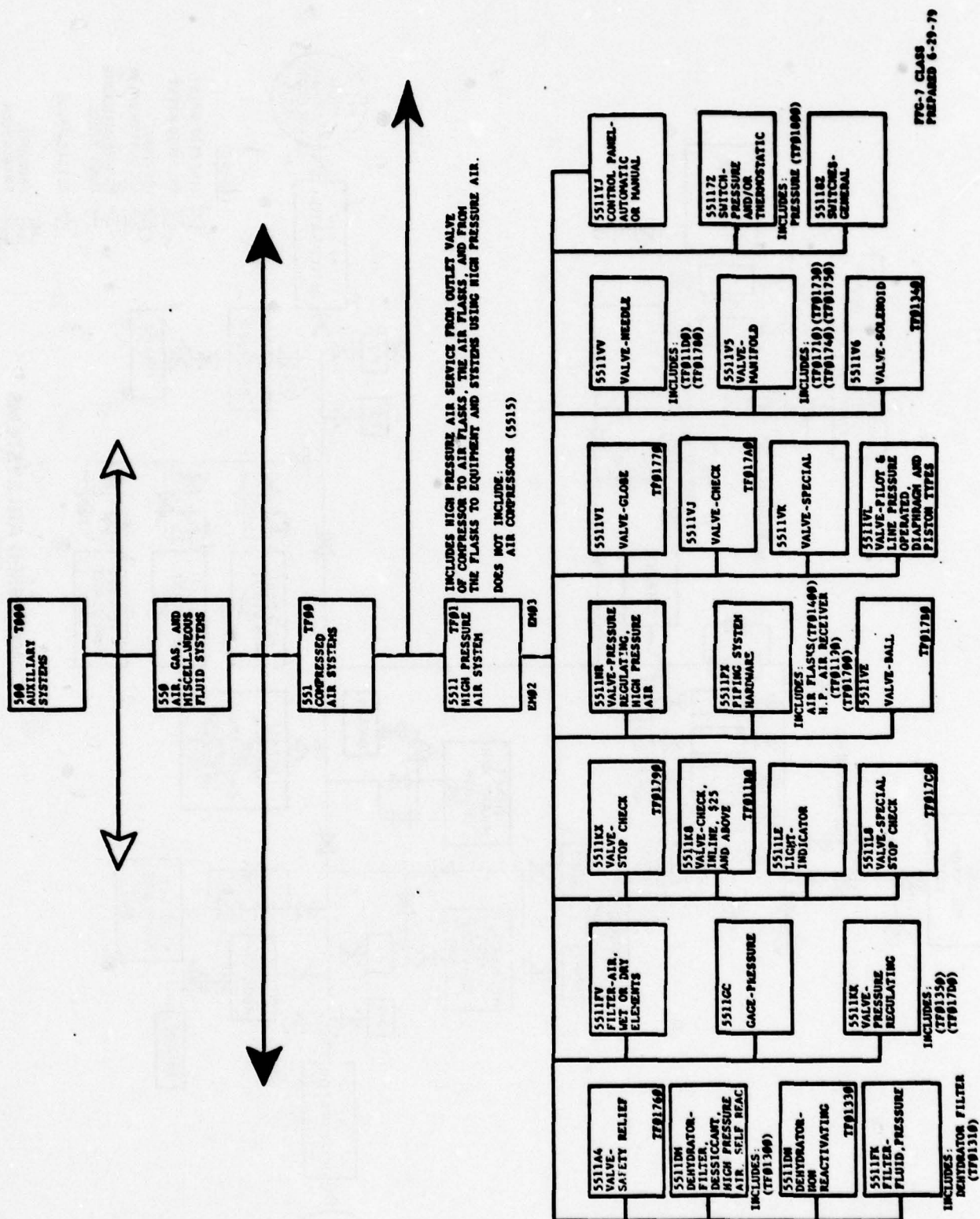
AVIATION AND GENERAL PURPOSE FUELS 542

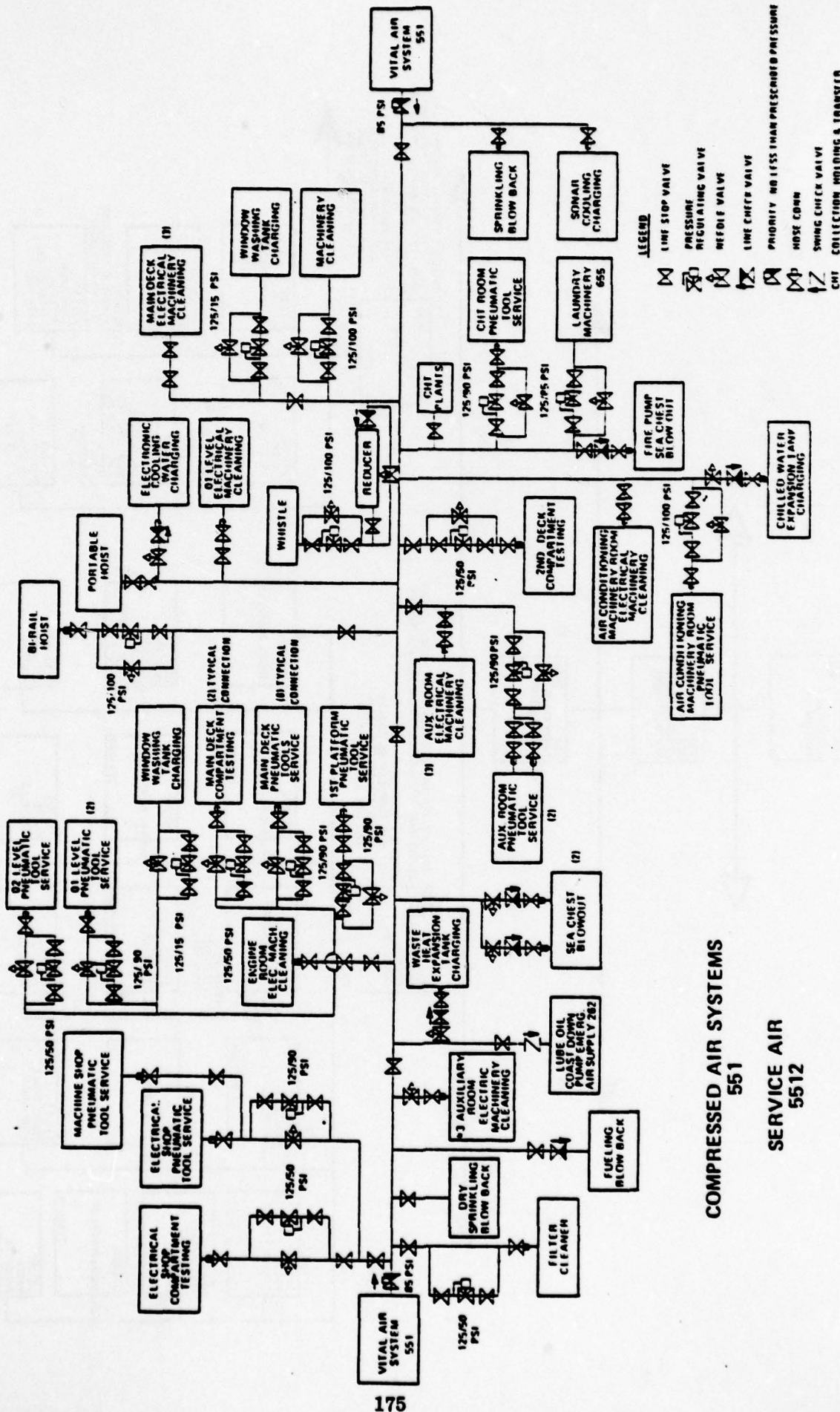










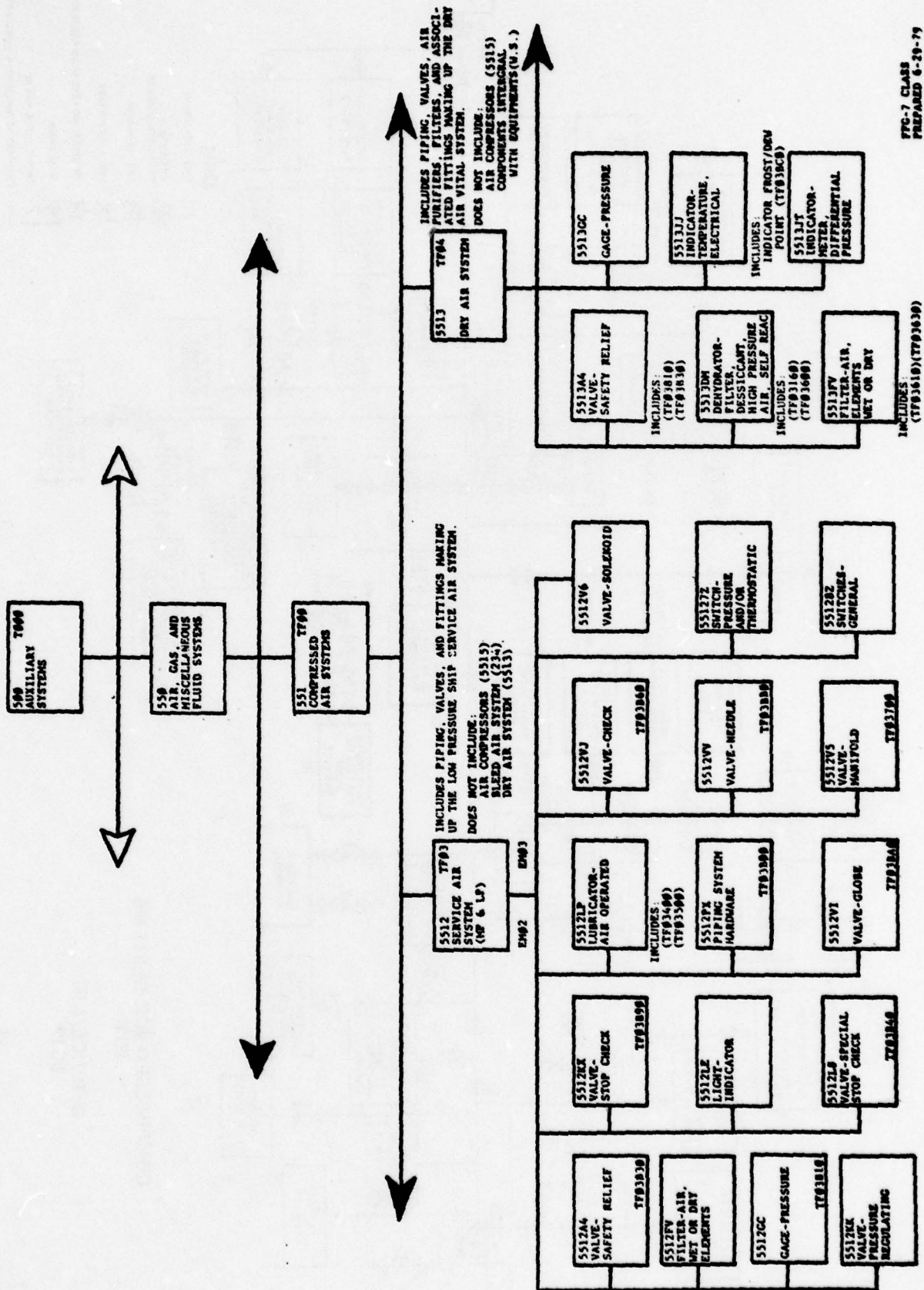


LEGEND

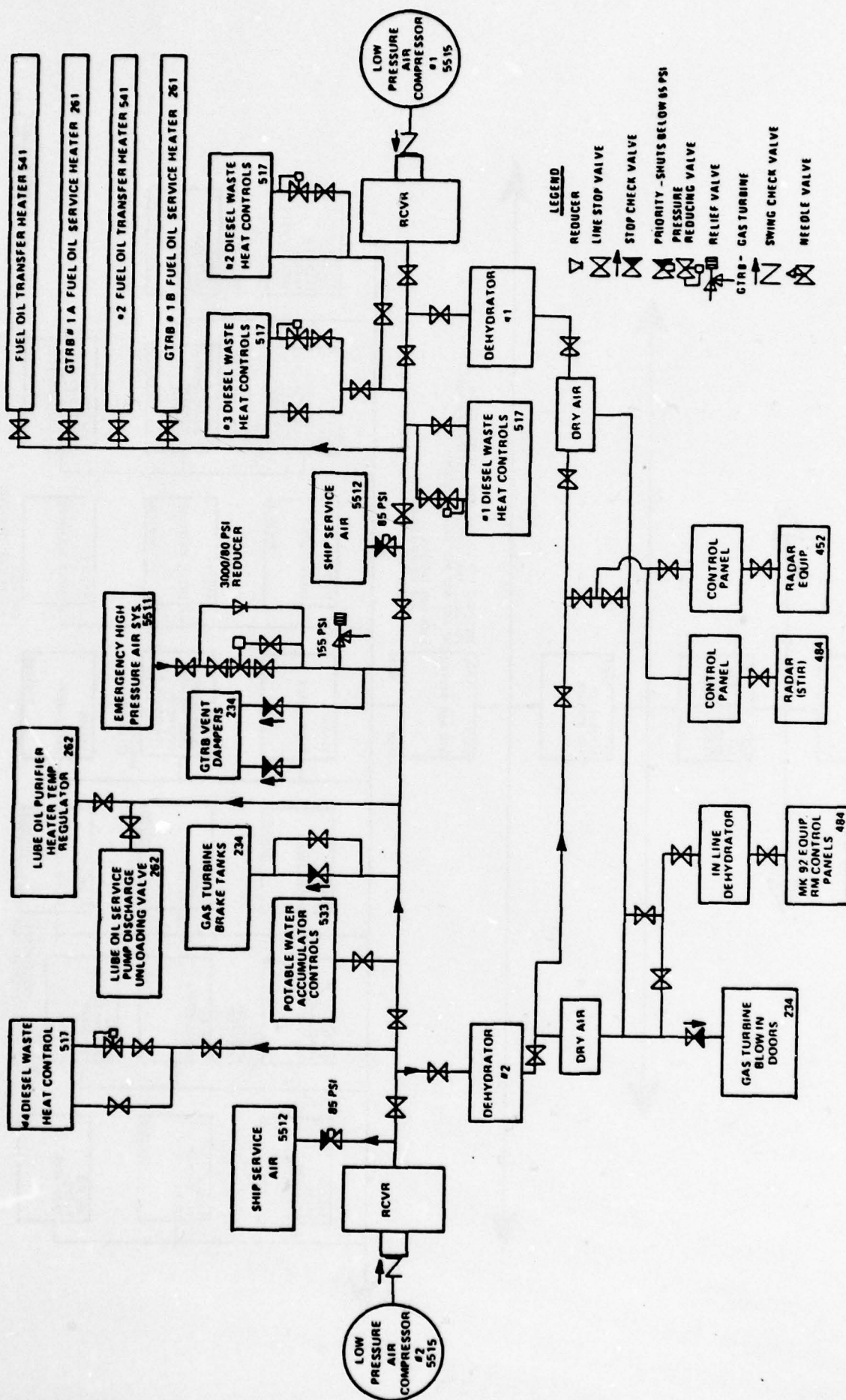
- LINE STOP VALVE
- PRESSURE REGULATING VALVE
- FEED VALVE
- LINE CHECK VALVE
- PRIORITY NO. 1 LESS THAN PRESCRIBED PRESSURE
- HOSE DOWN
- SWING CHECK VALVE
- CHT COLLECTION, HOLDING & TRANSFER

COMPRESSED AIR SYSTEMS
551

SERVICE AIR
552



PTC-7 CLASS
PREPARED 6-29-79

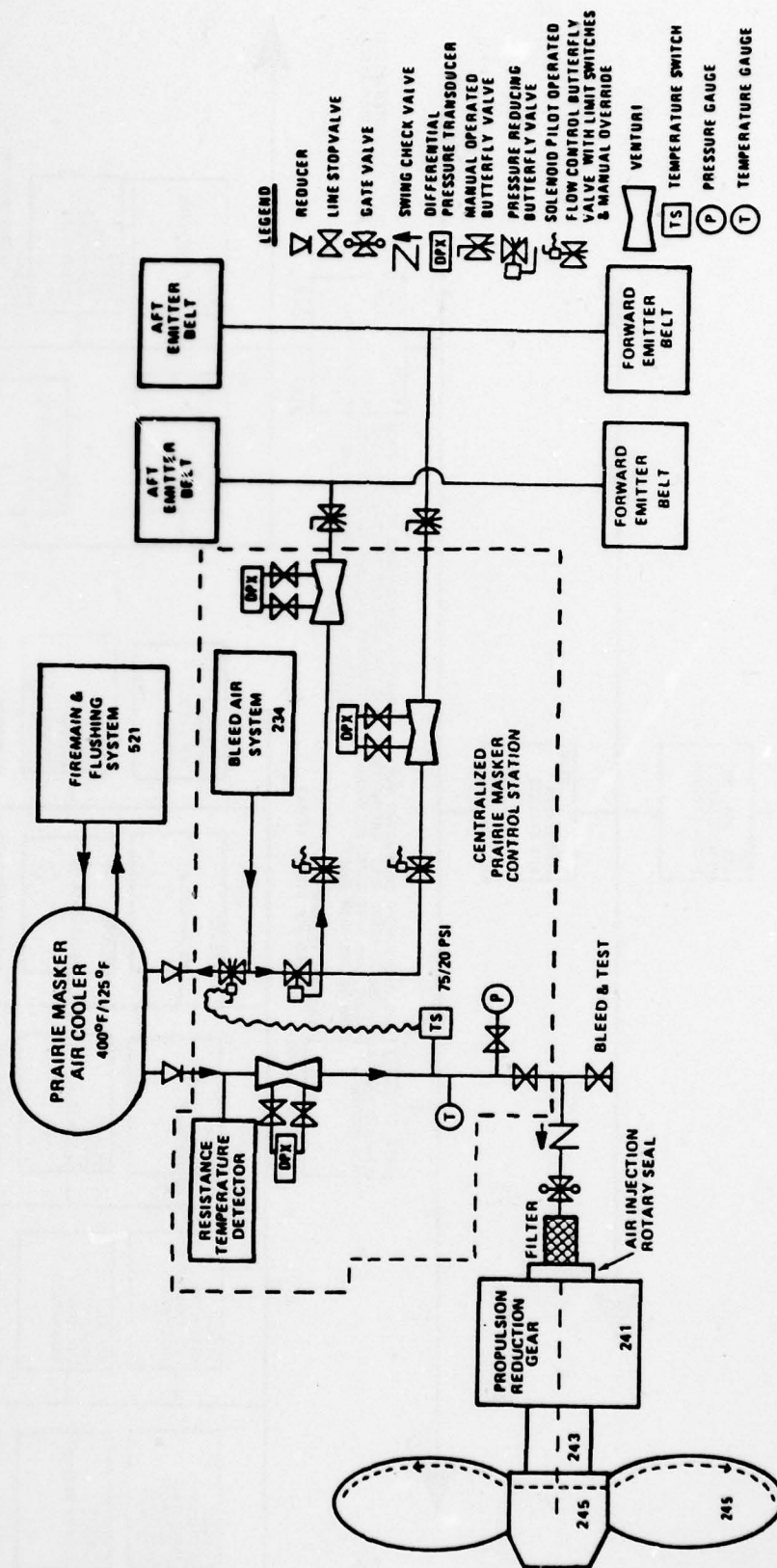


COMPRESSED AIR SYSTEMS

551

DRY AIR (VITAL)

5513



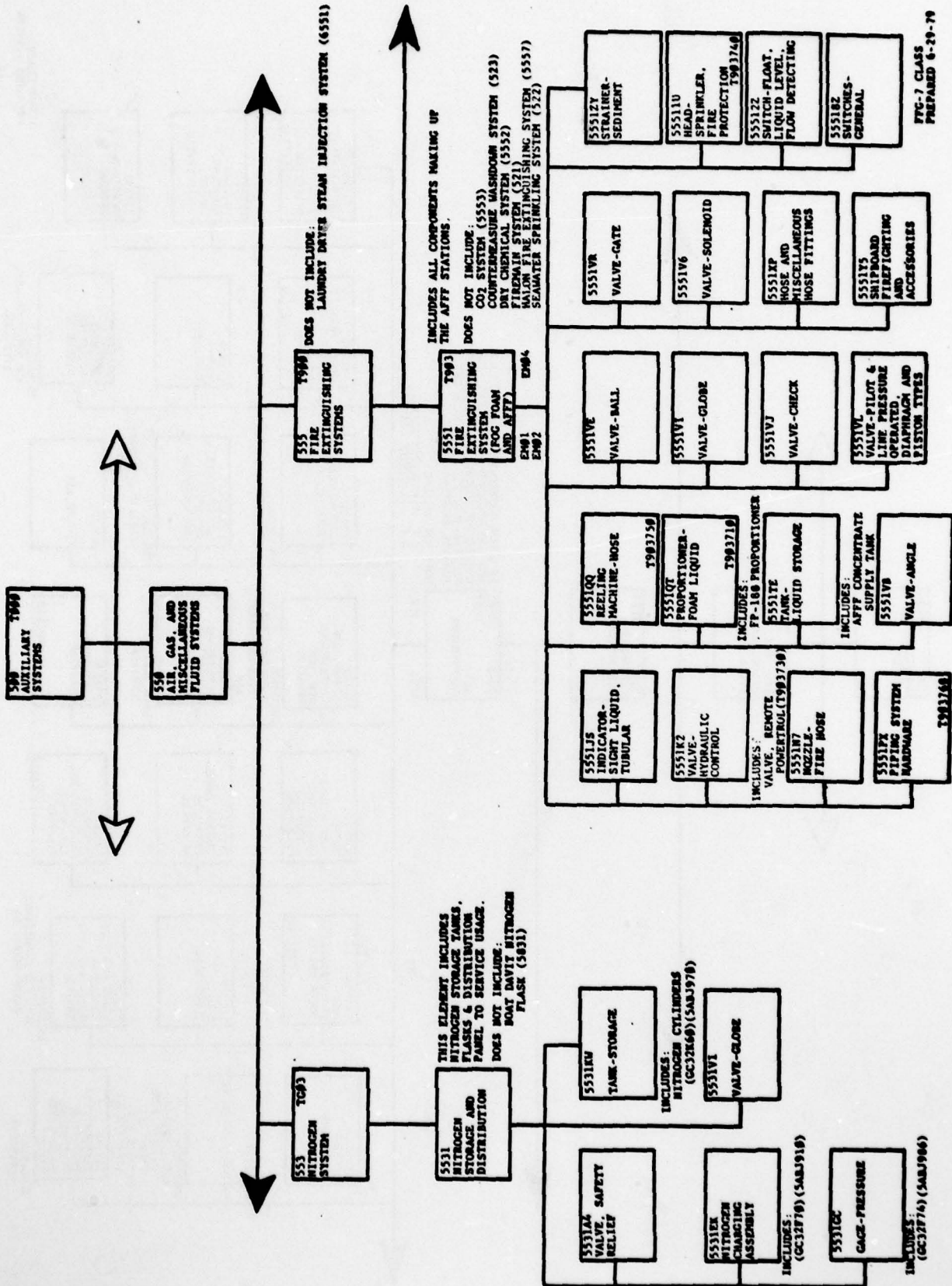
COMPRESSED AIR SYSTEMS

551

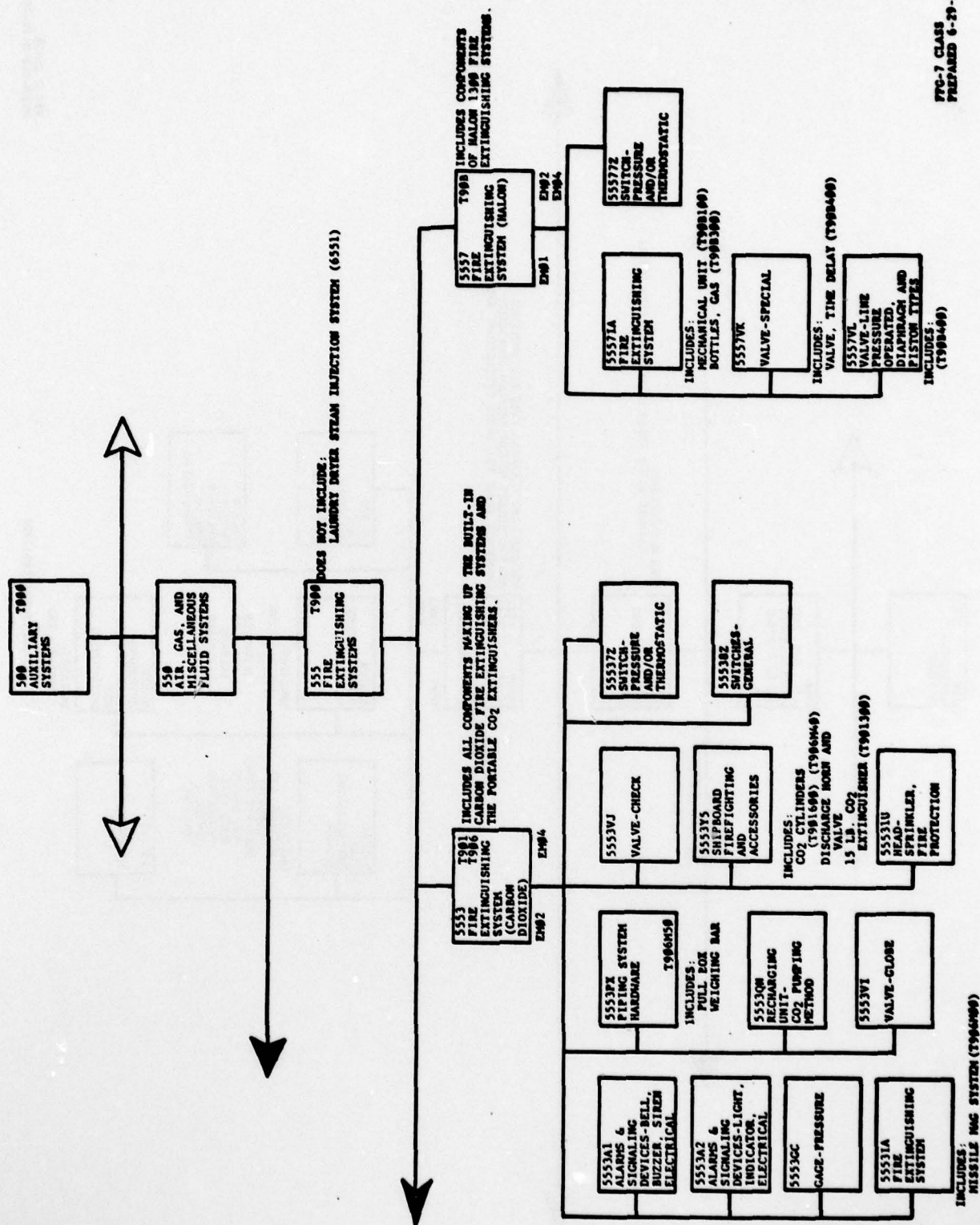
PRAIRIE MASKER AIR SYSTEM

5514

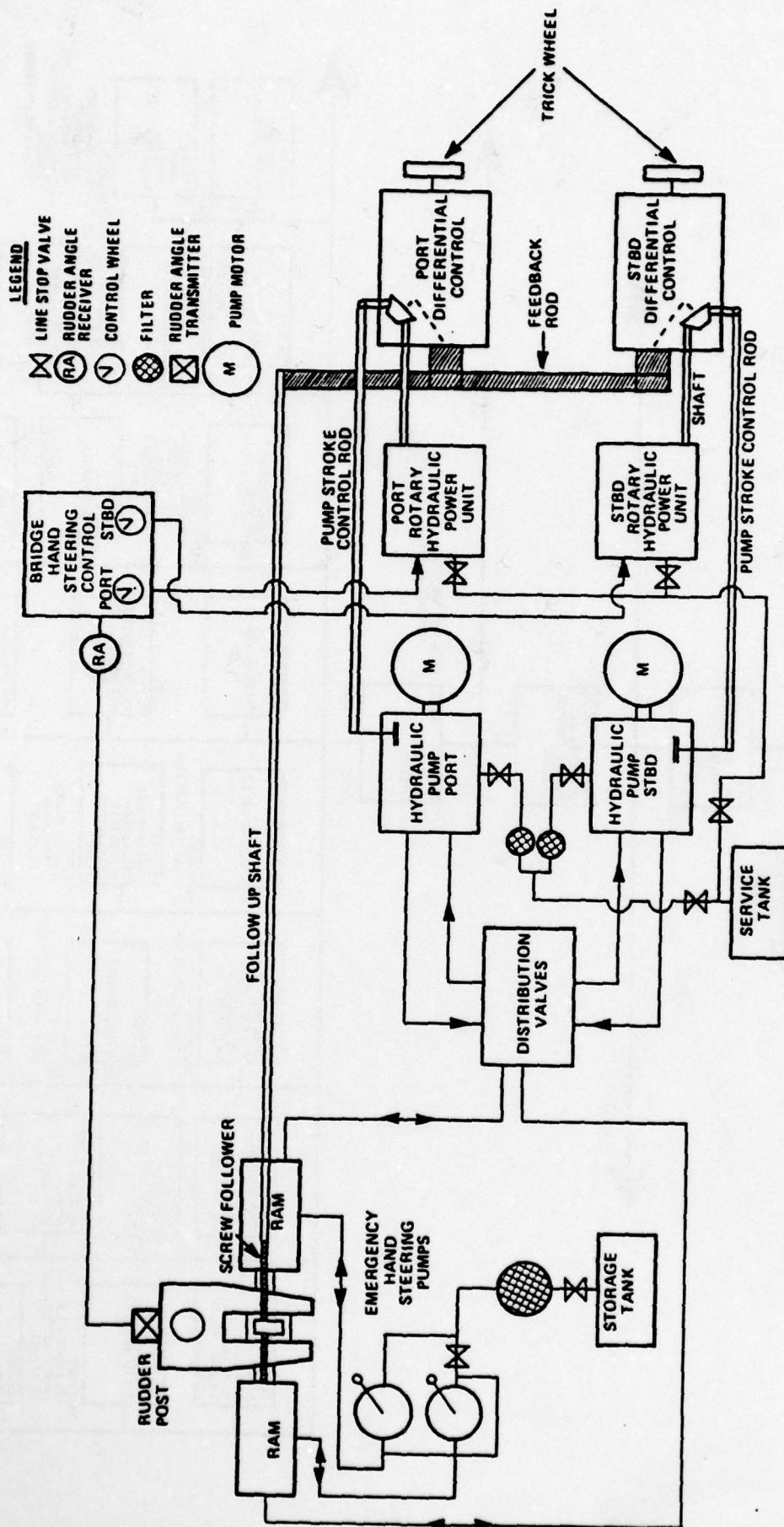




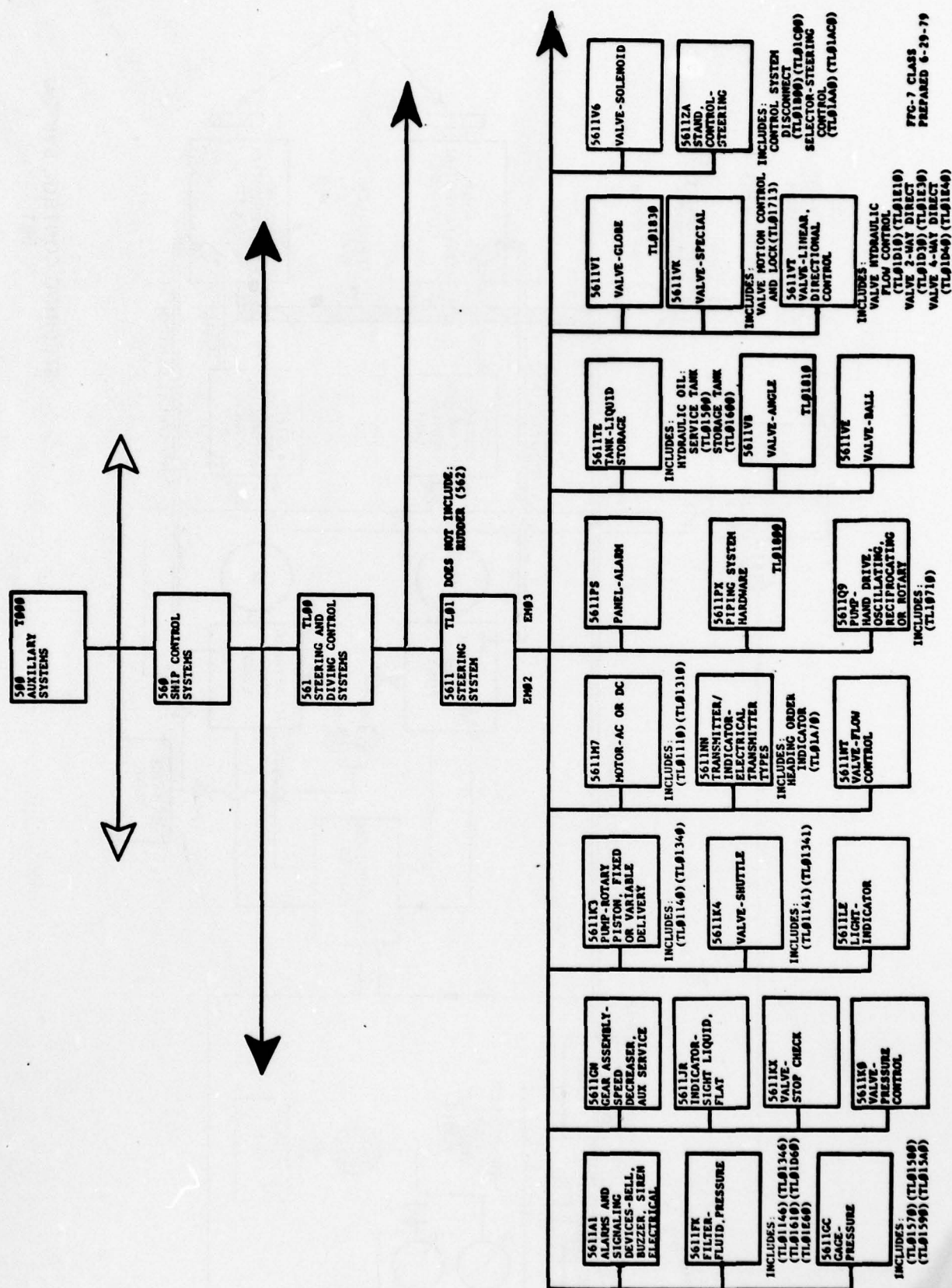


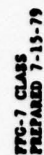


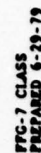
FTO-7 CLASS
PREPARED 6-29-79

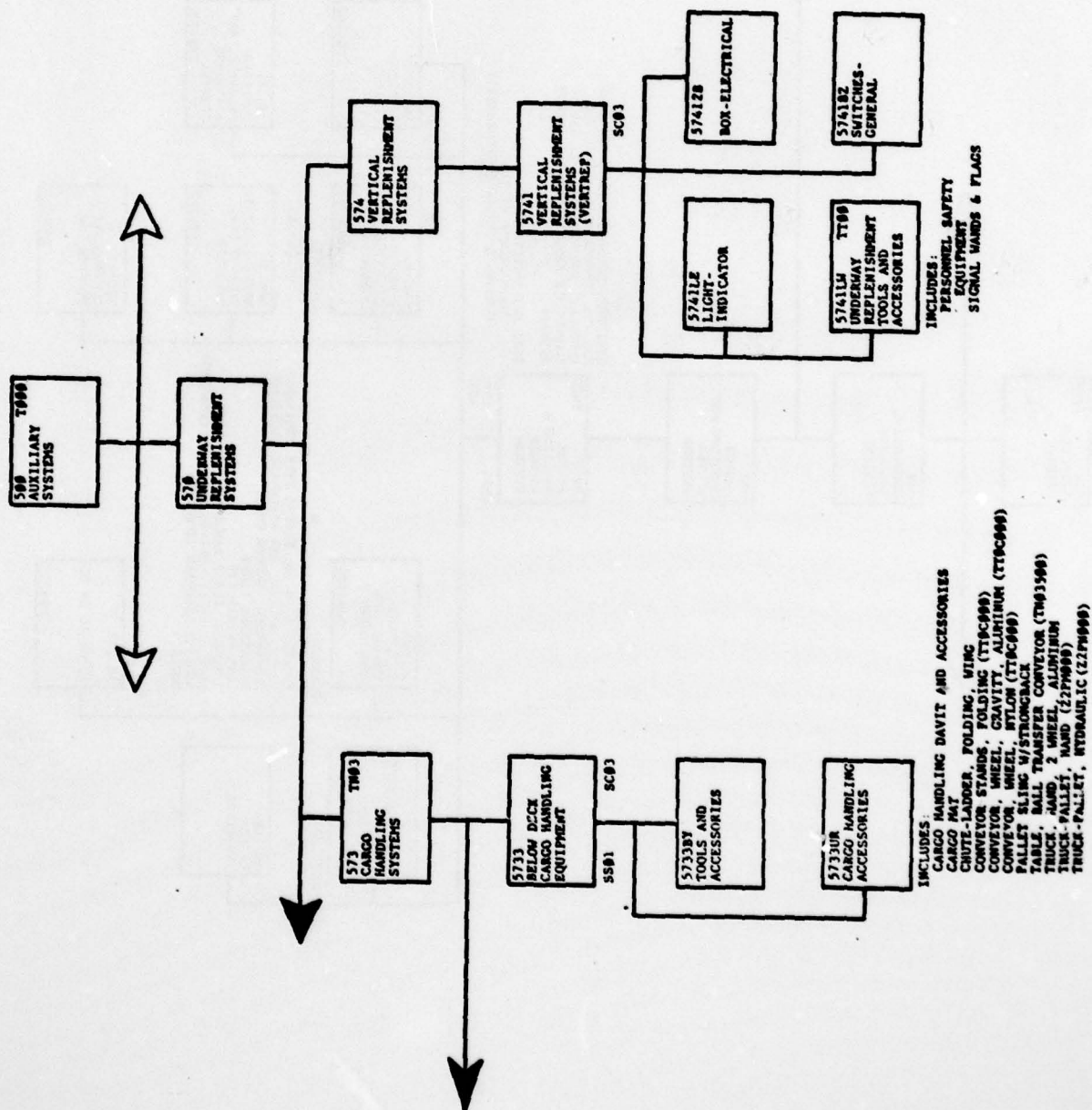


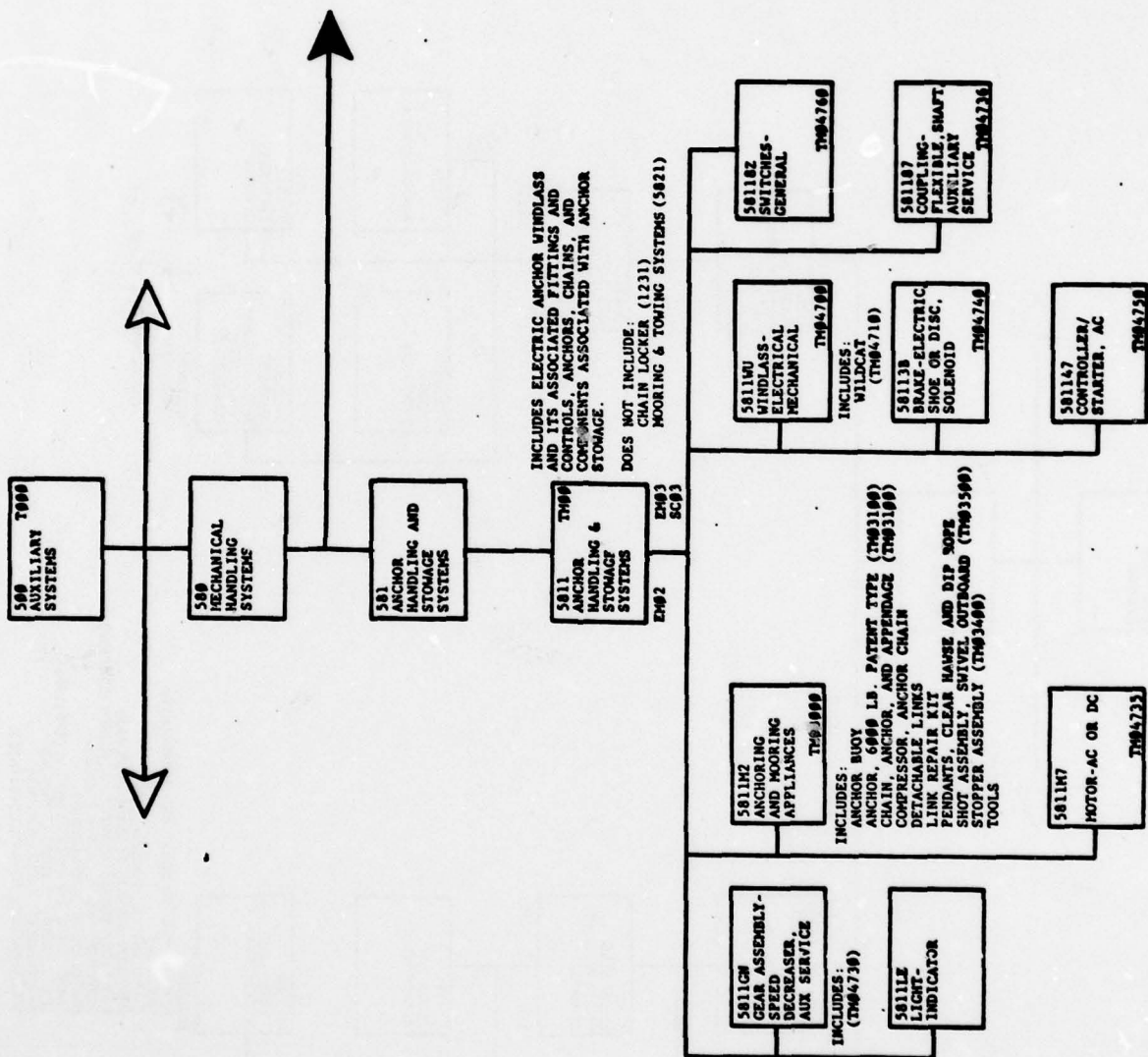
STEERING CONTROL SYSTEM
561











FTC-7 CLASS
PREPARED 6-29-79

UNCLASSIFIED

1861-01-1-1979

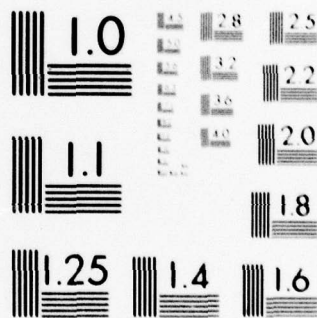
N00140-77-D-0417-0033

NL

AD
A073541

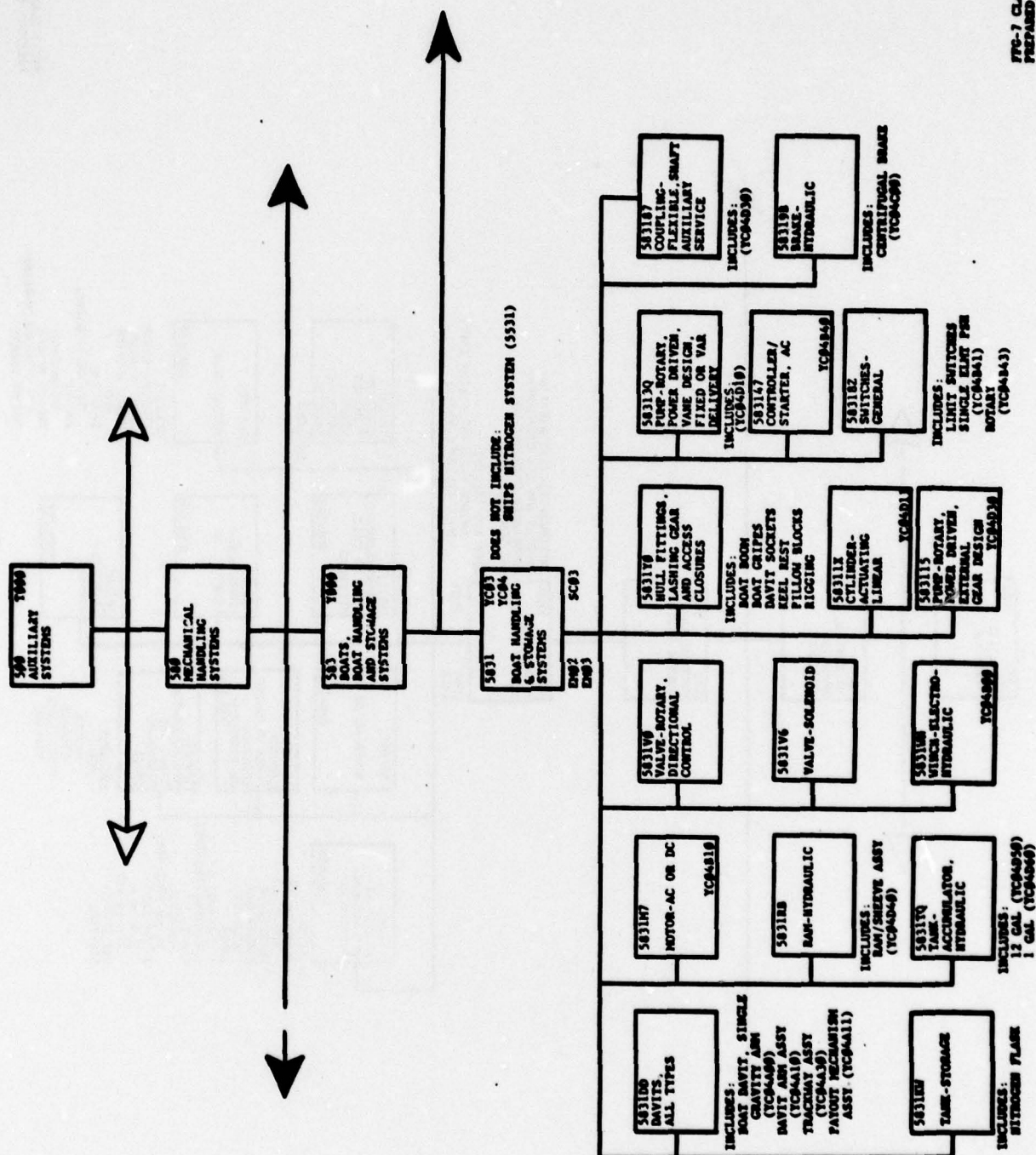
END
DATE
FILMED
10-79

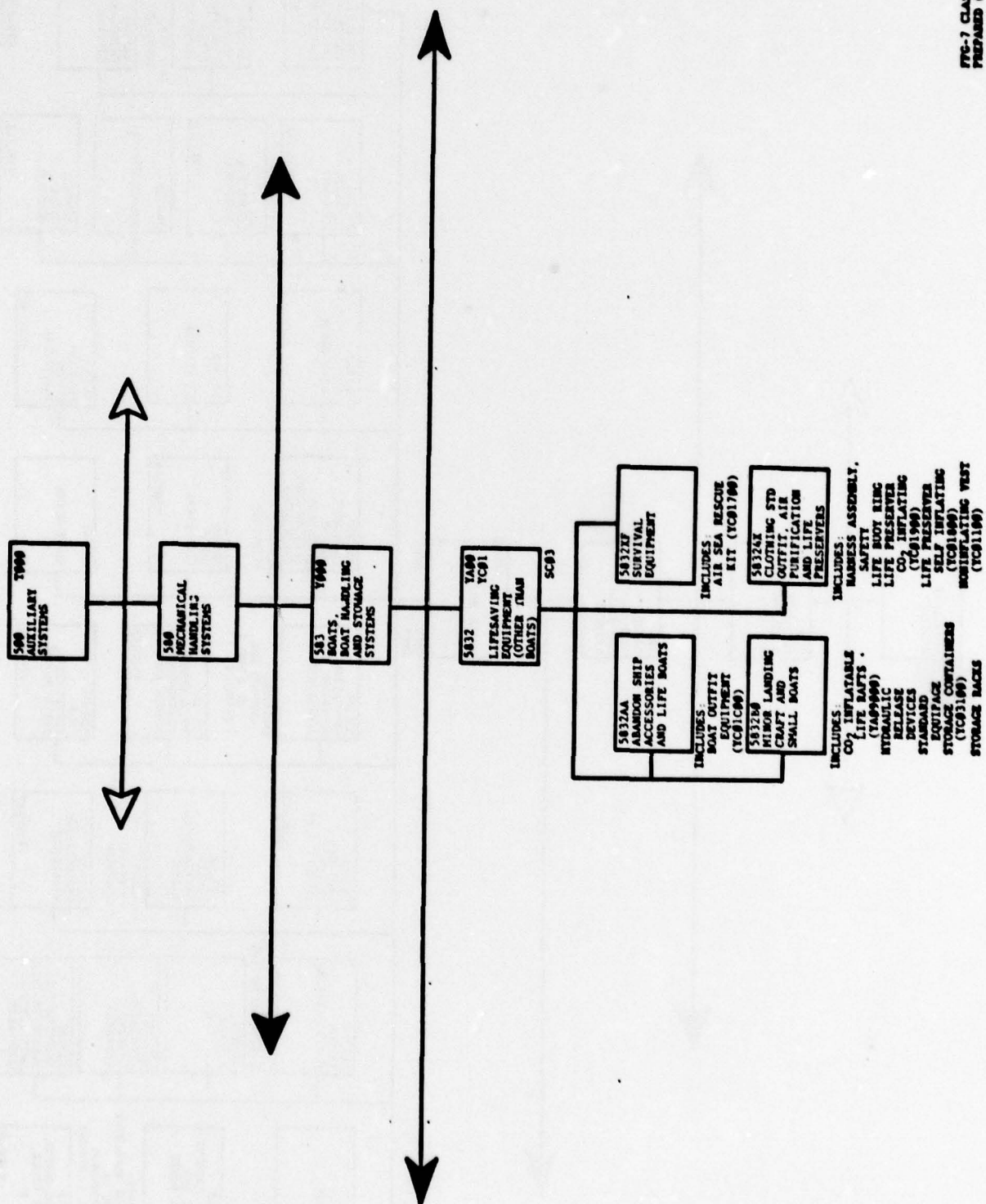
DDC

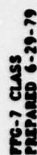


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

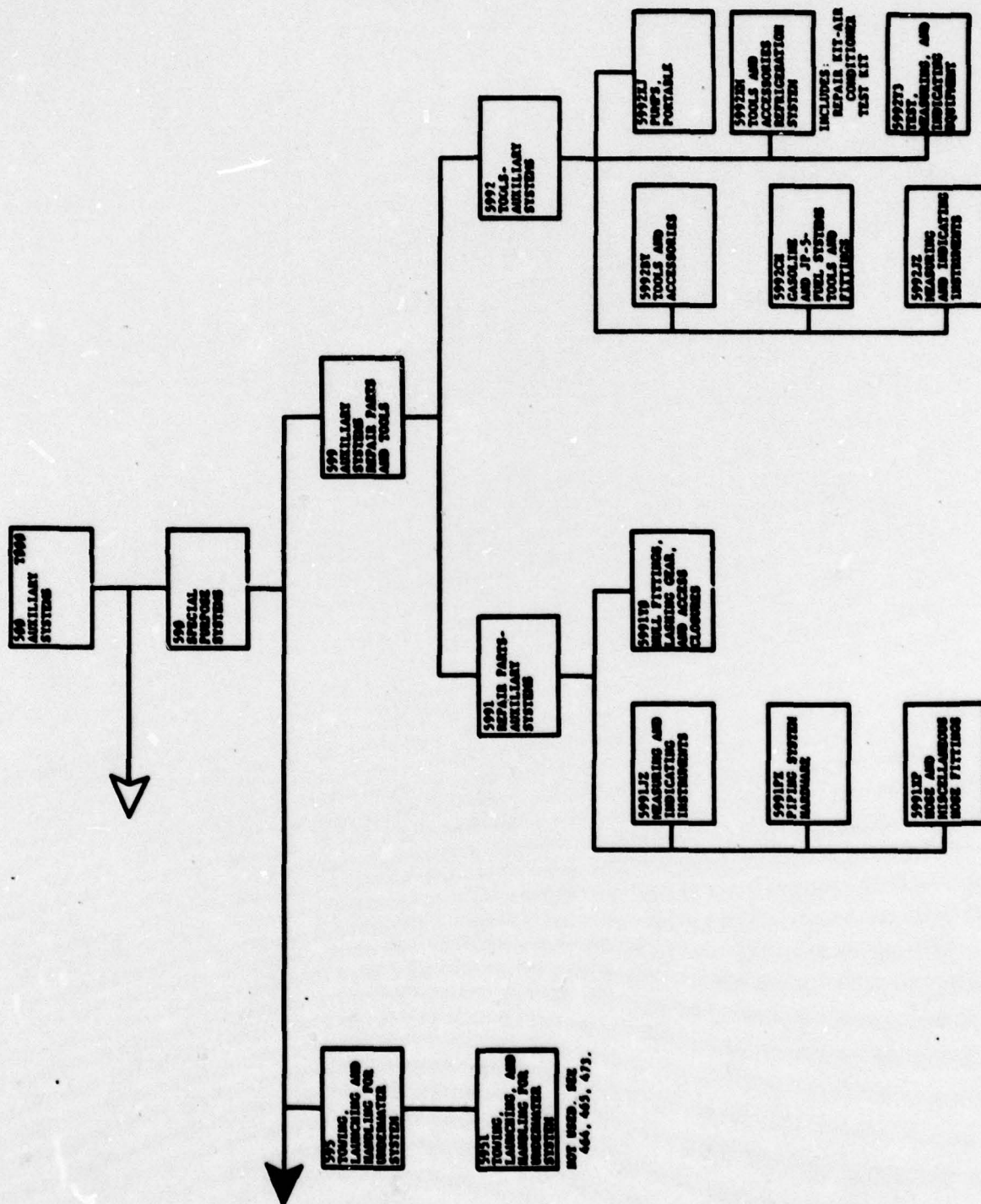












FFC-7 CLASS
PREPARED 6-29-79

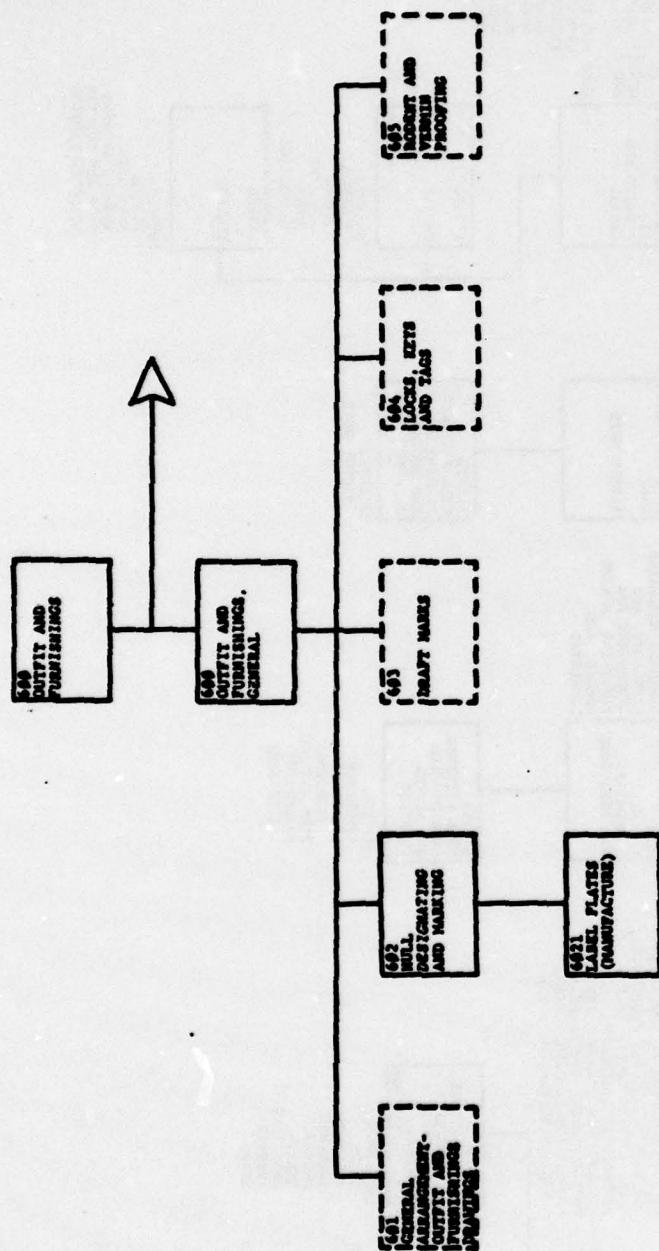


FIG-7 CLASS
PREPARED 3-1-79

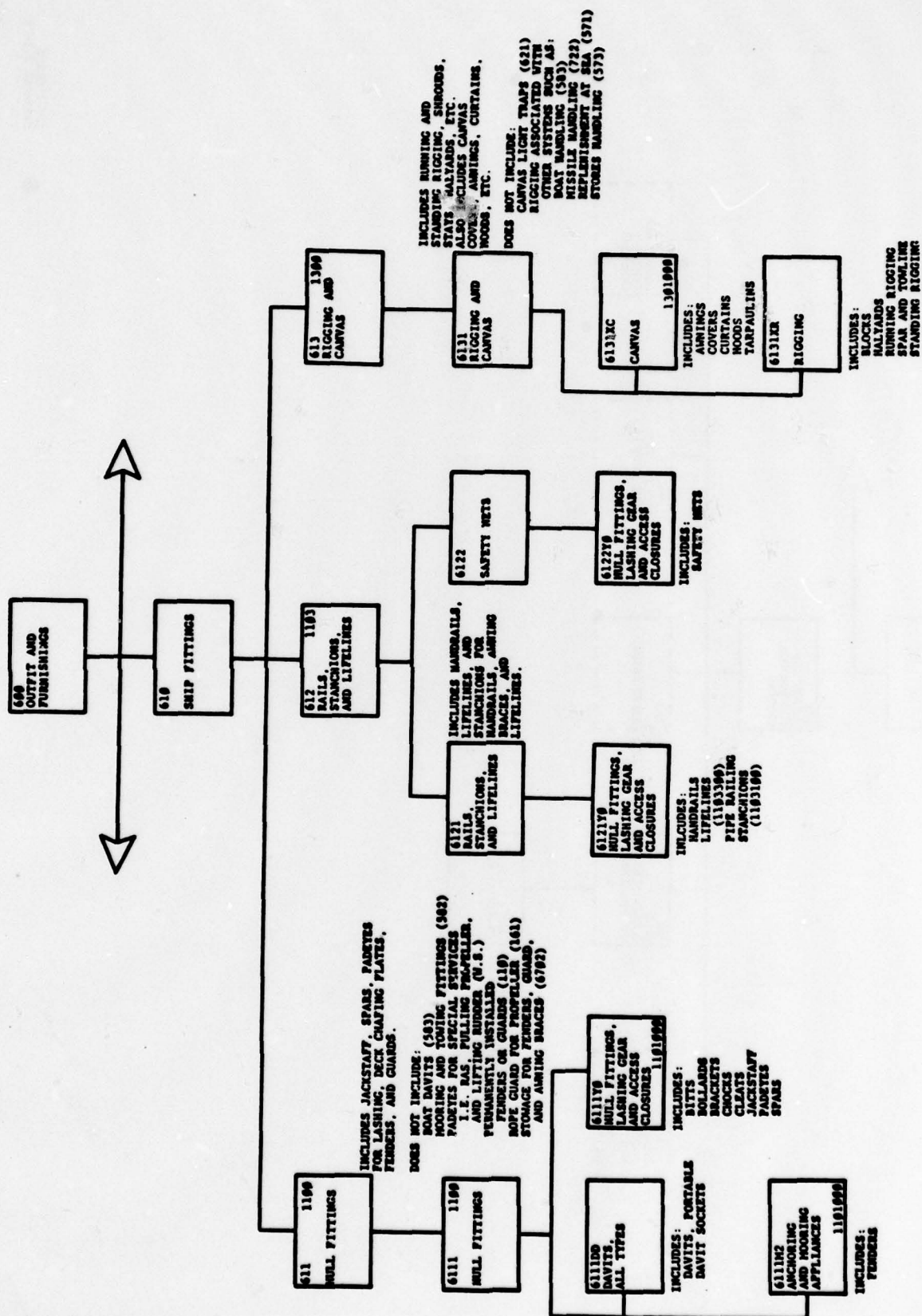
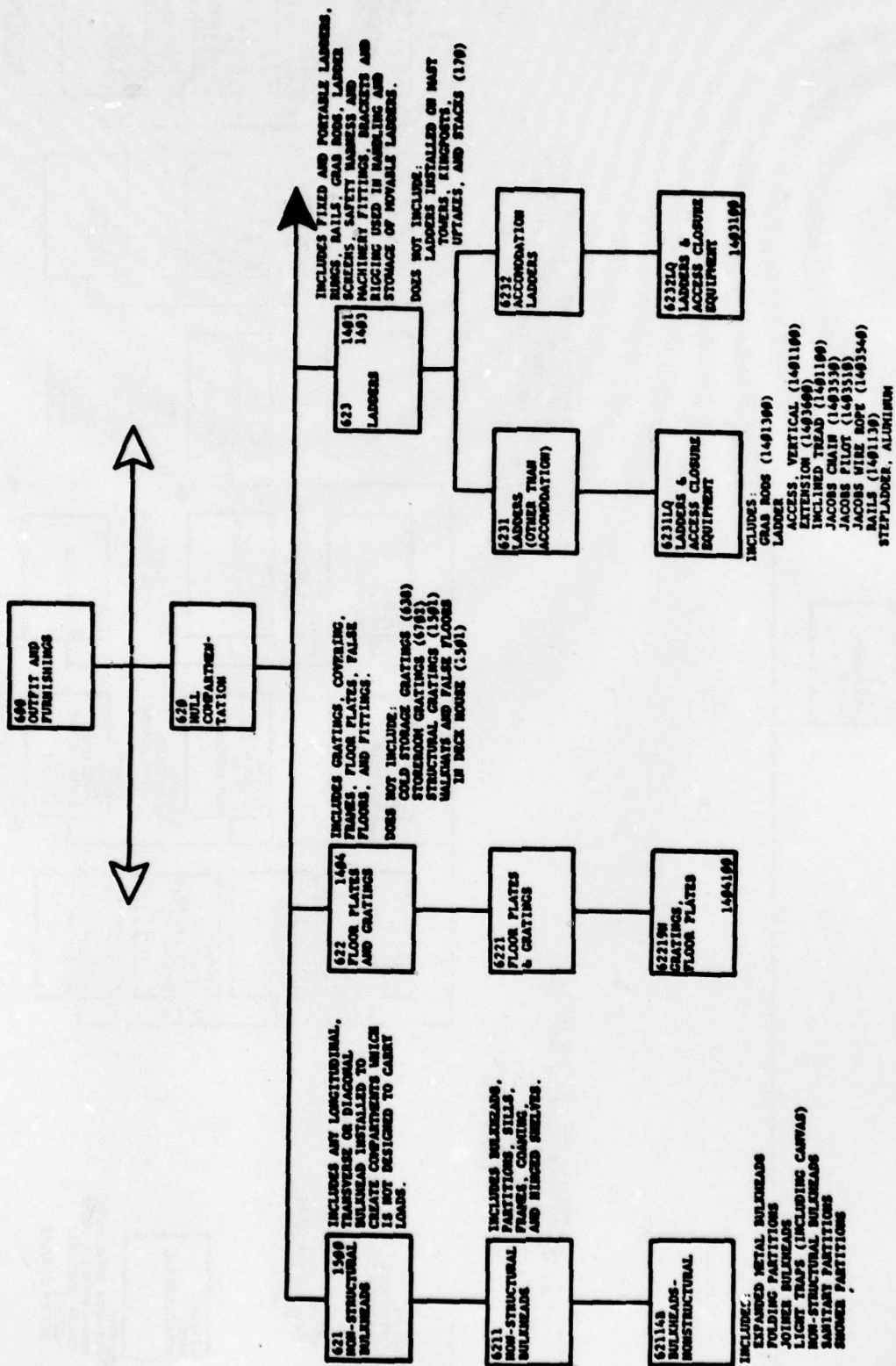
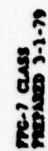


FIG-7 CLASS
 PREPARED 6-28-79

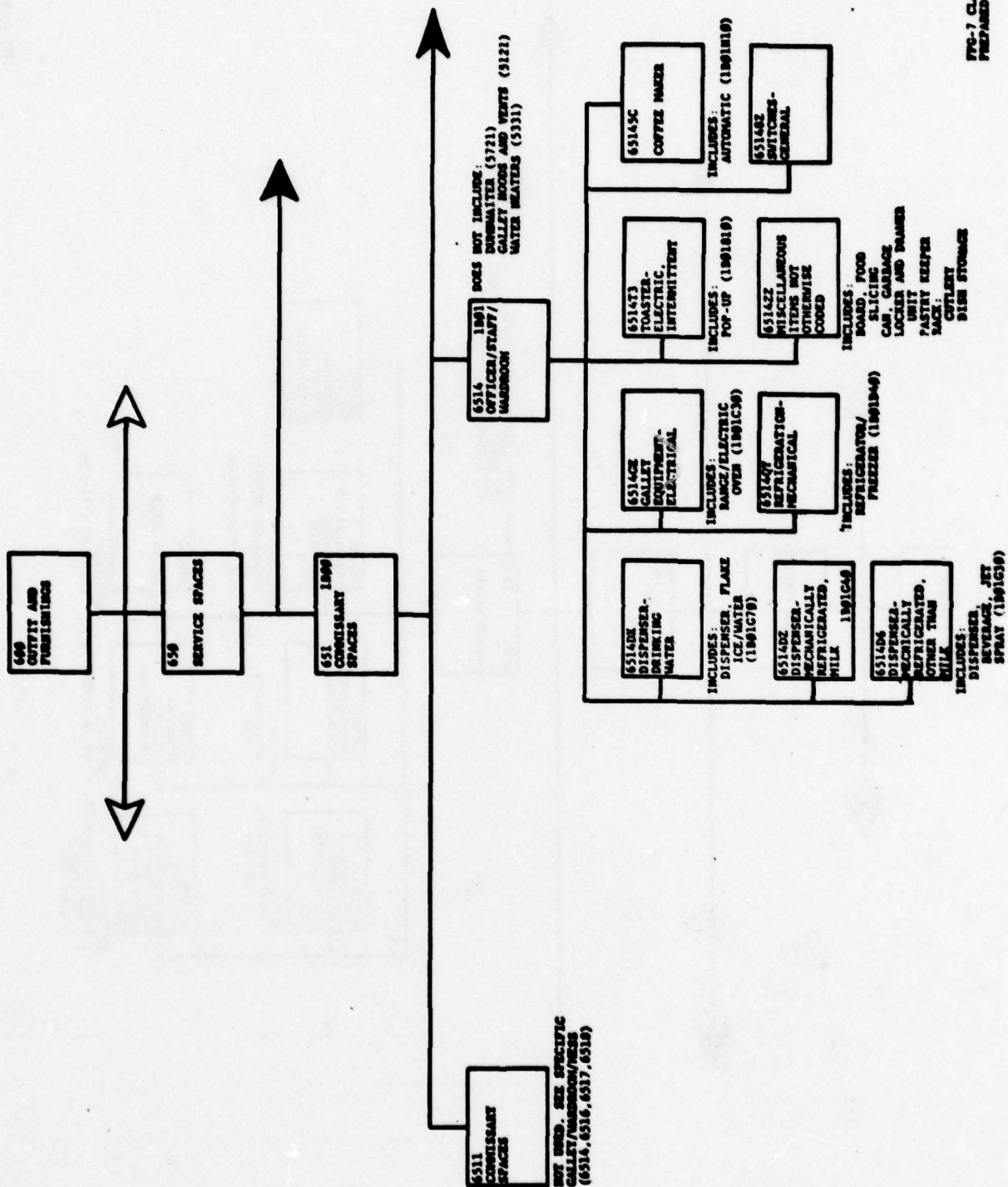




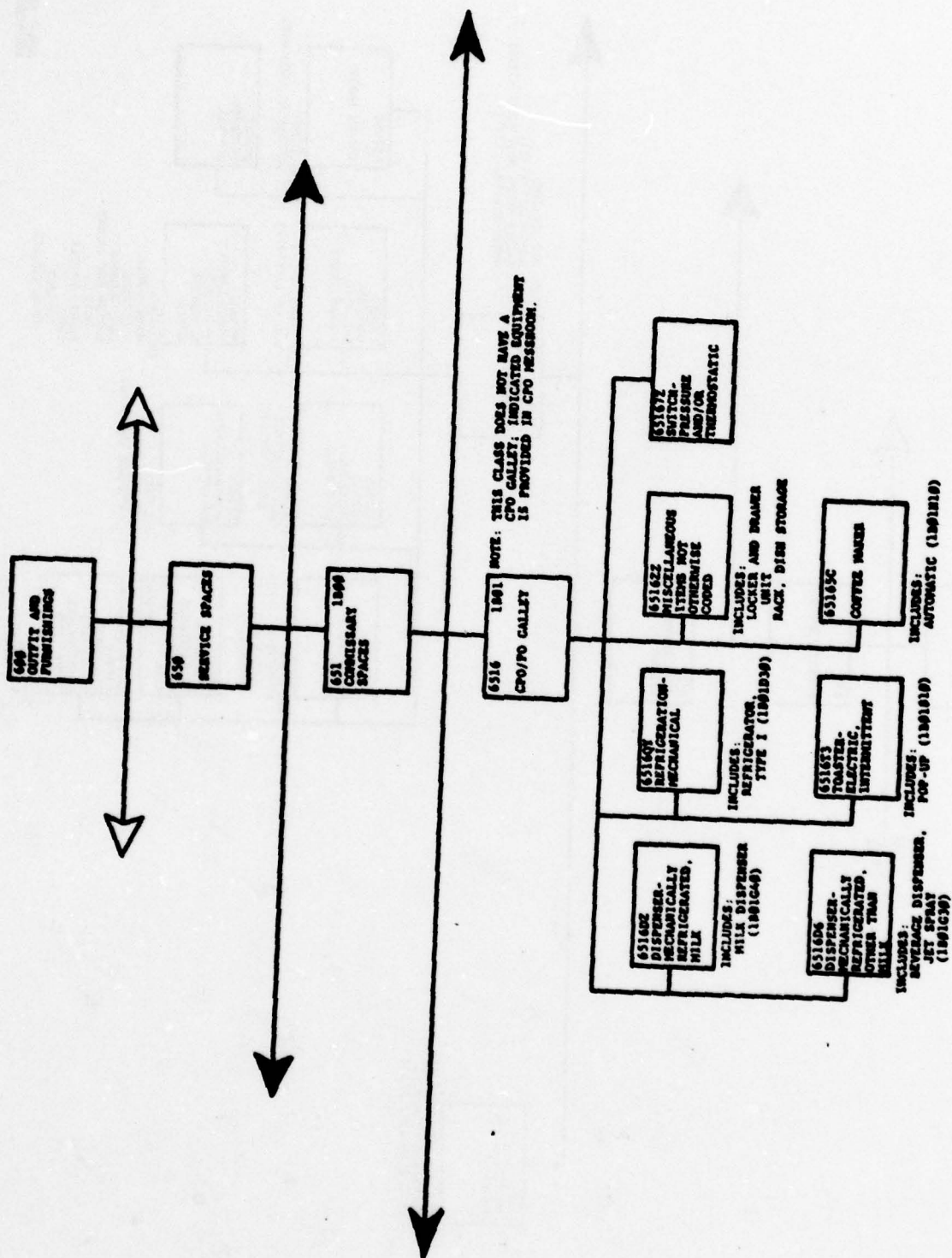


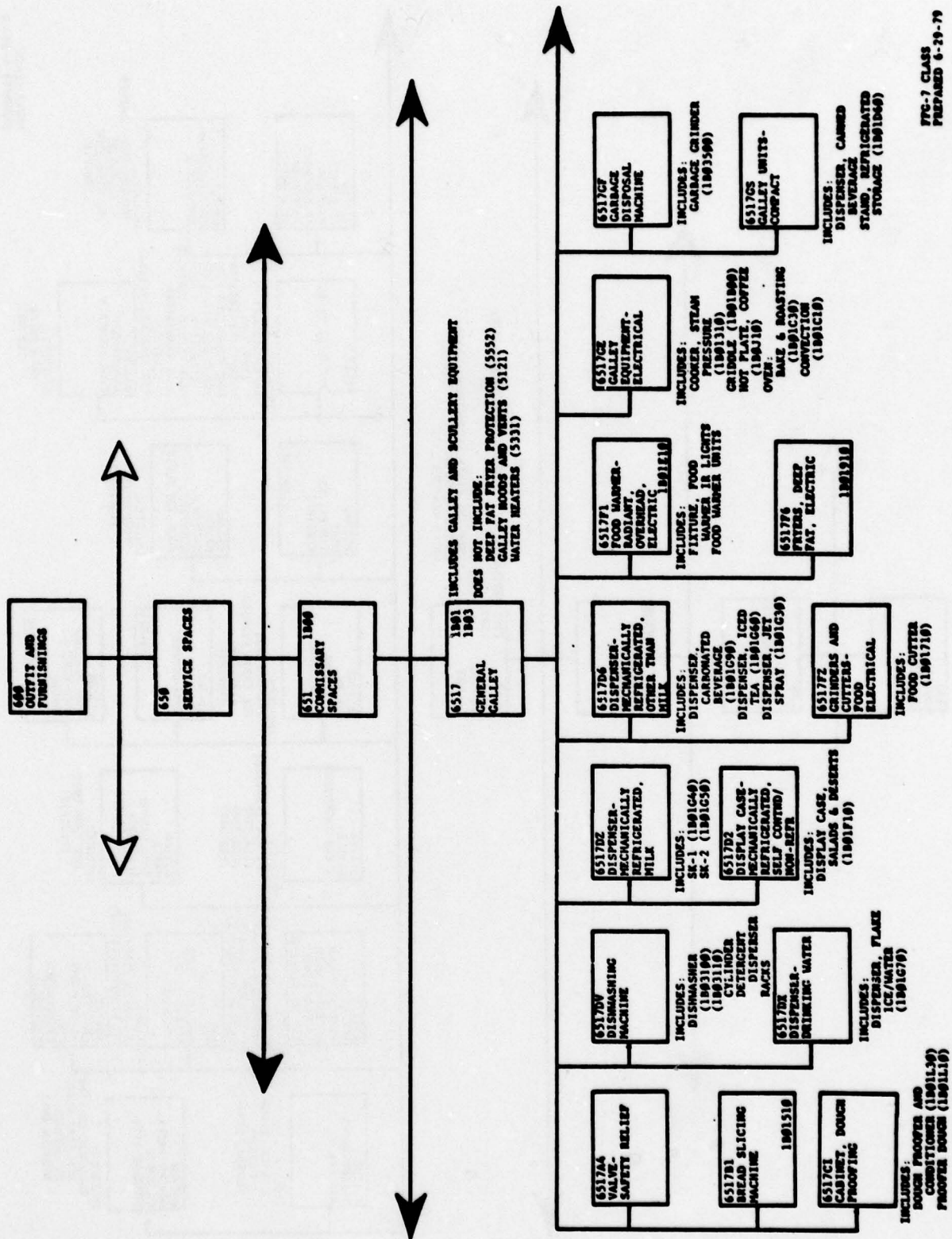




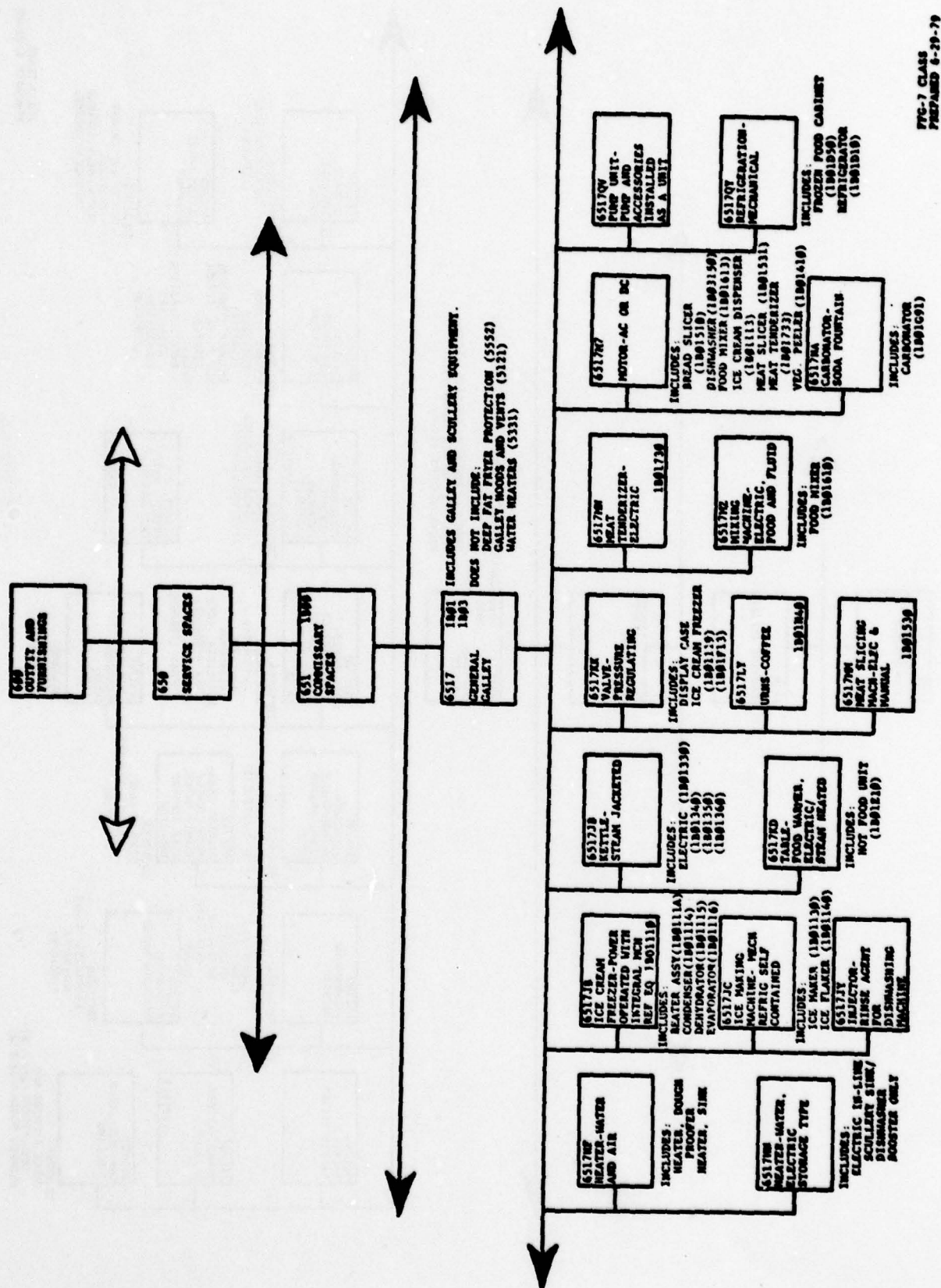


FFC-7 CLASS
PREPARED 6-29-79



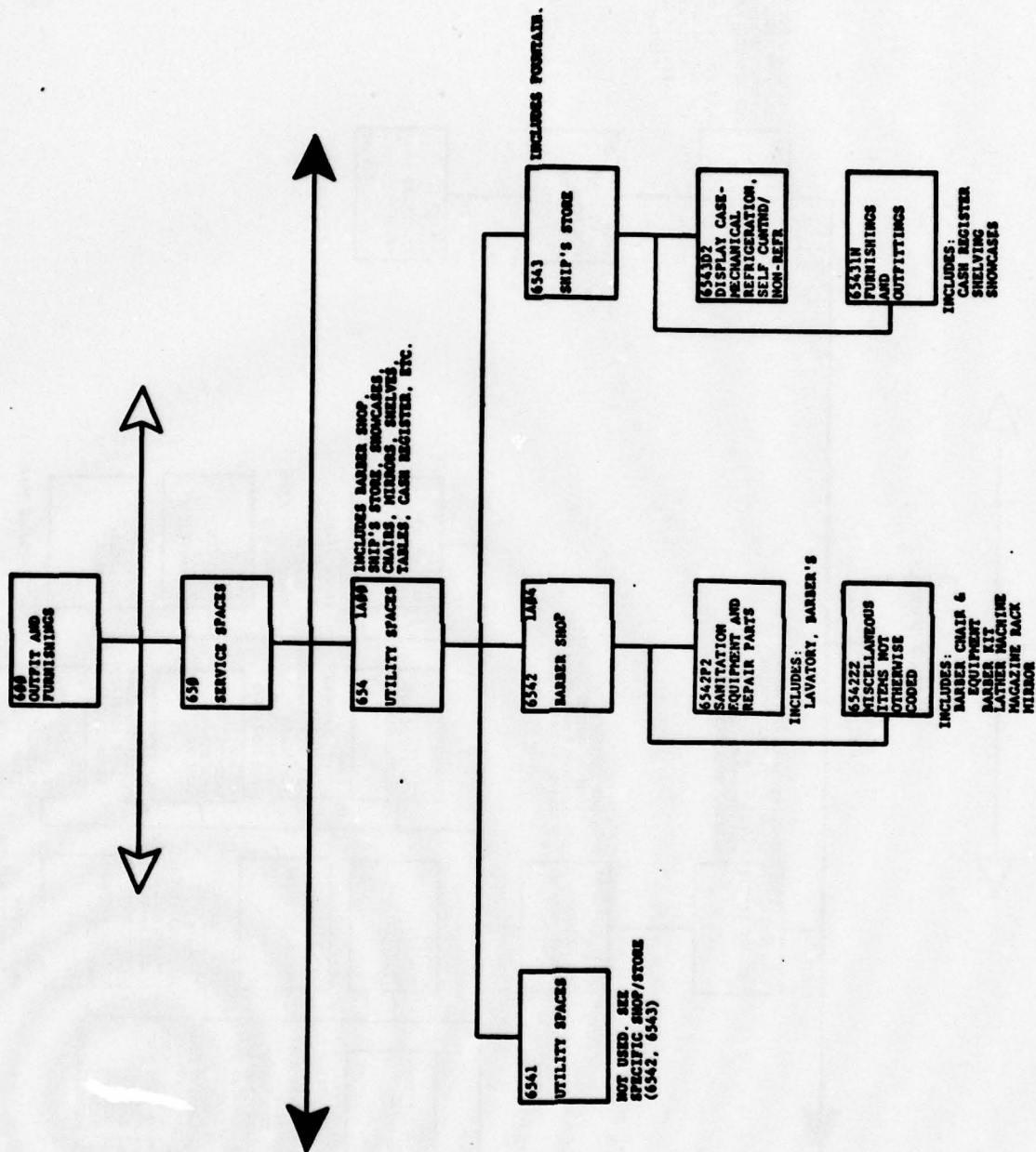


FFC-7 CLASS
PREPARED 6-29-79

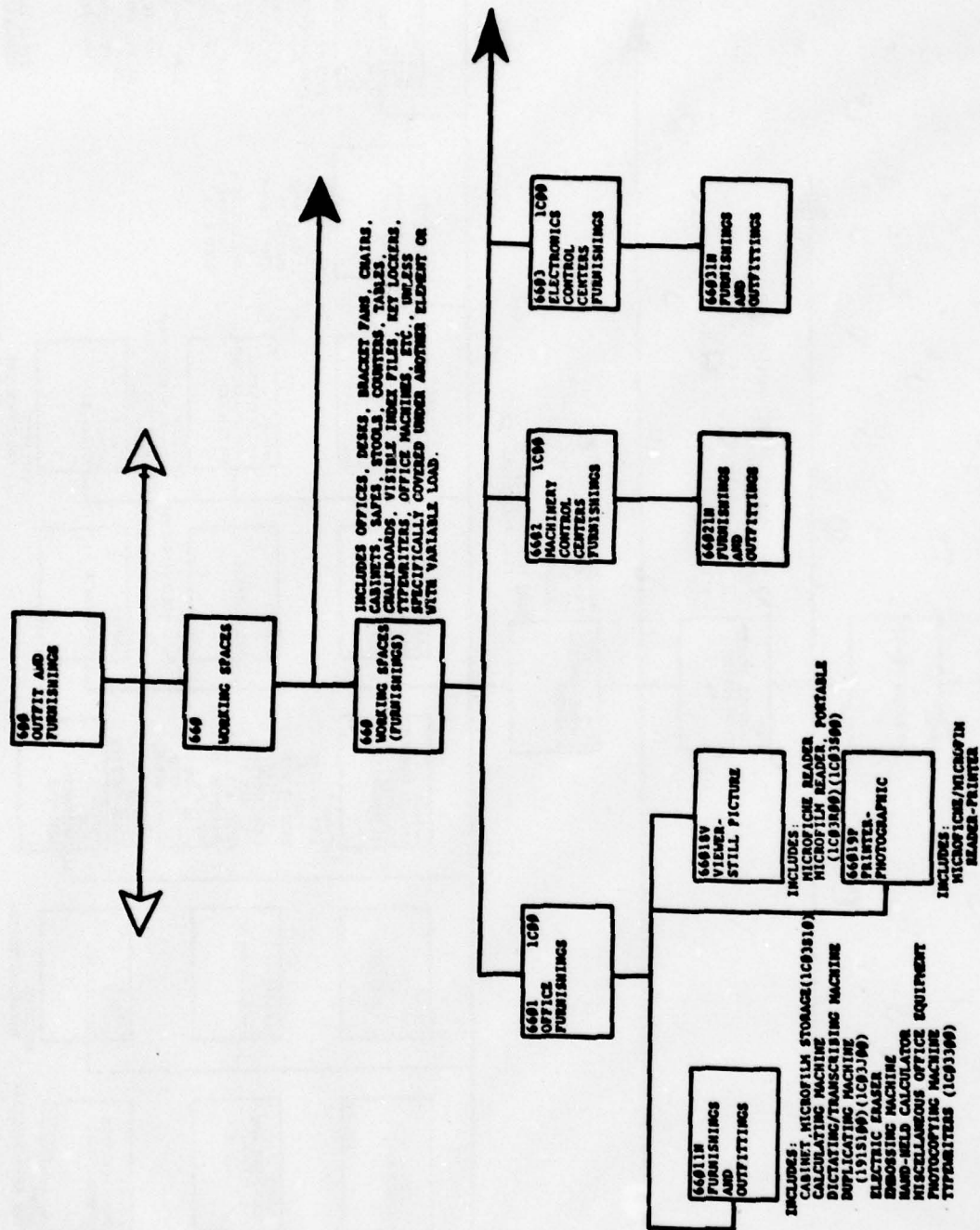


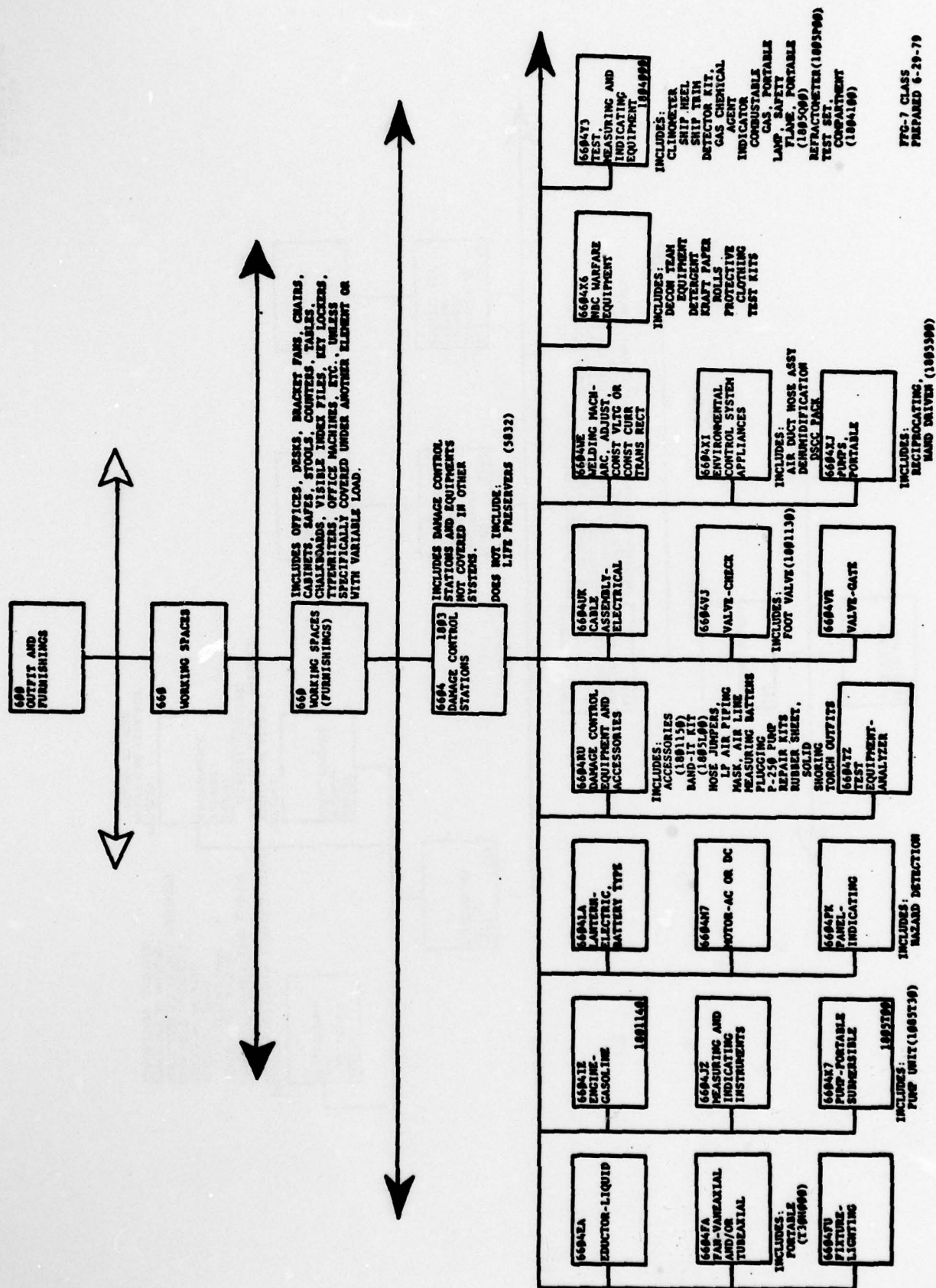




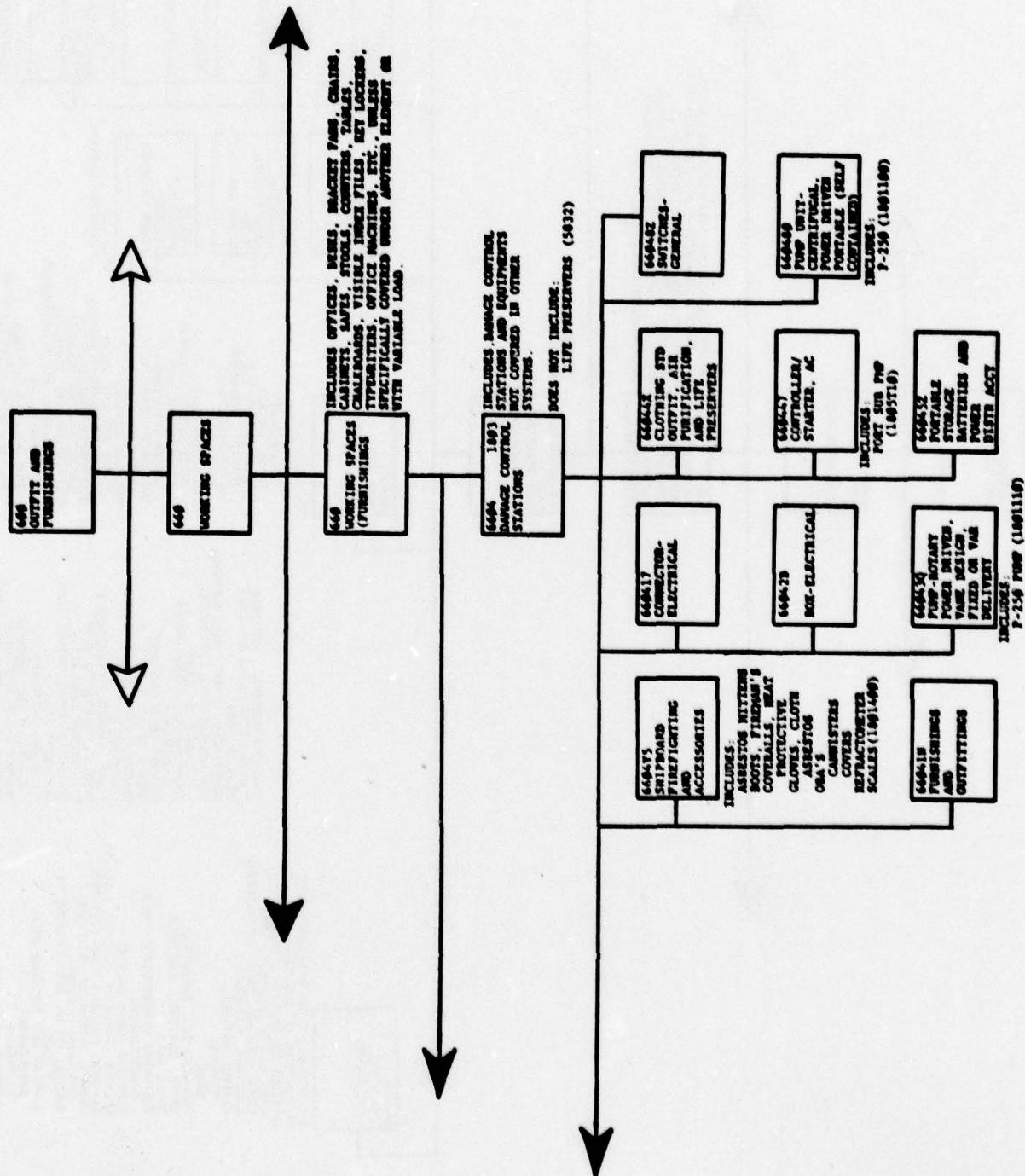




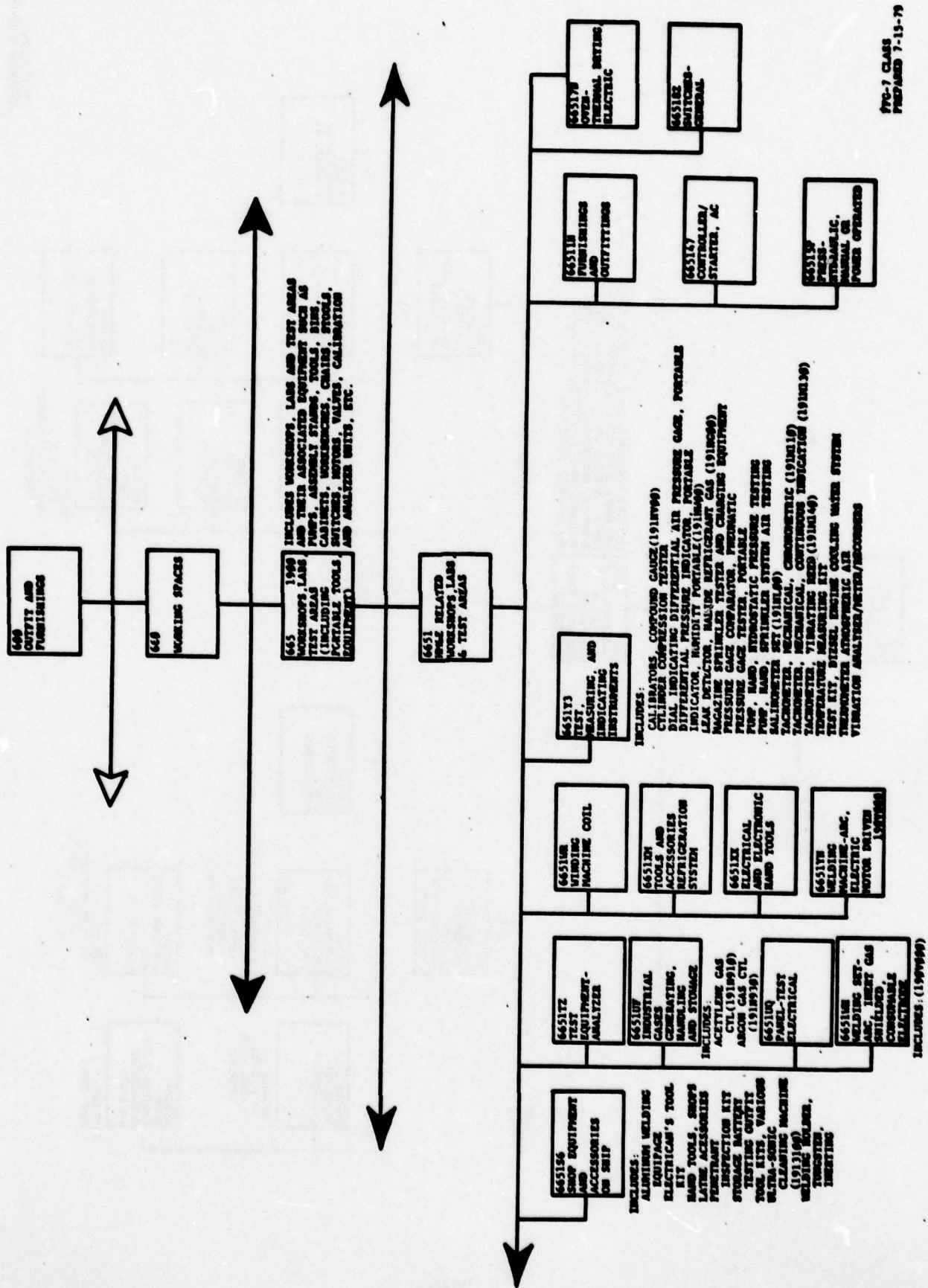




FTC-7 CLASS
 PREPARED 6-29-79







PPC-7 CLASS
PREPARED 7-13-79

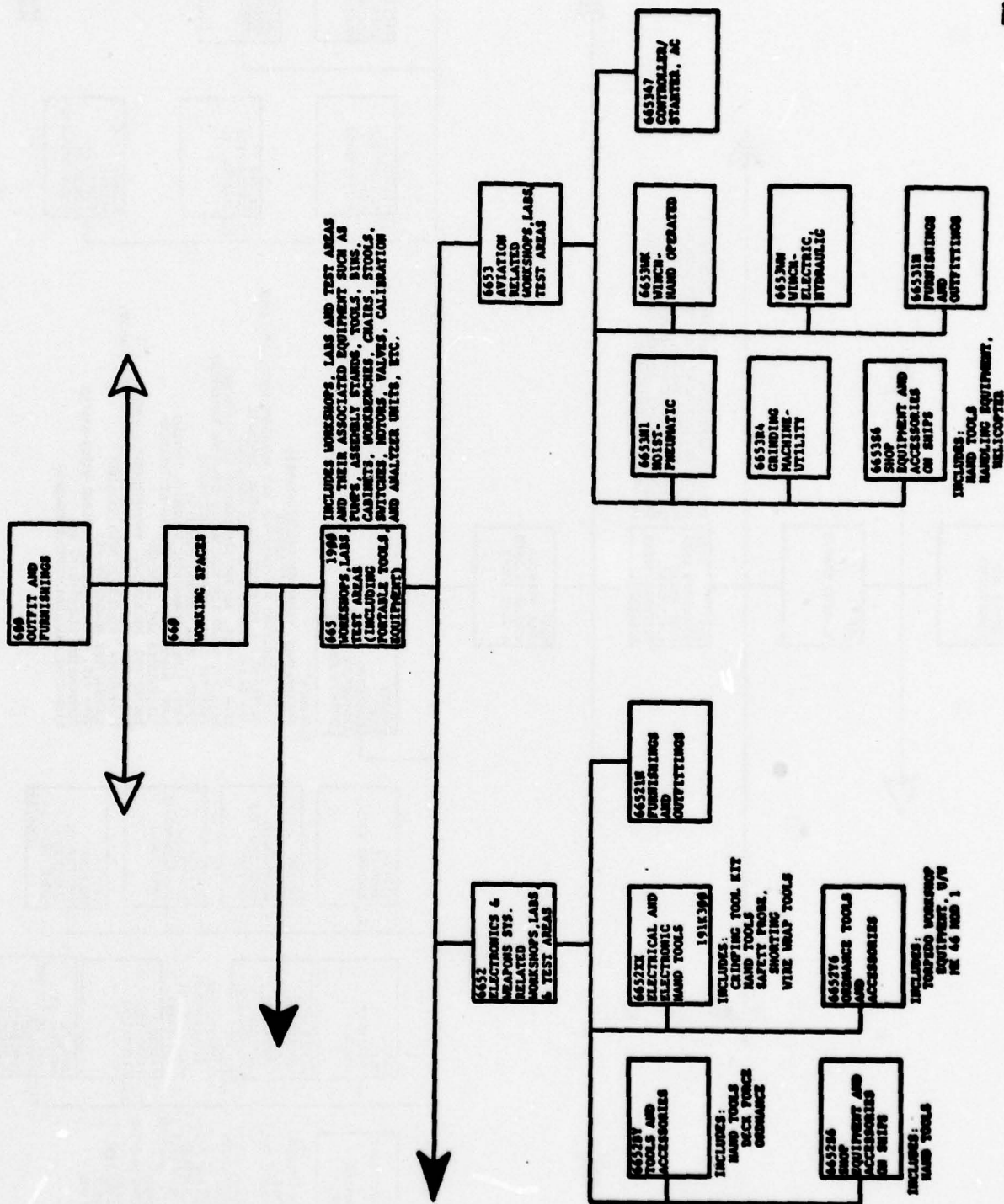
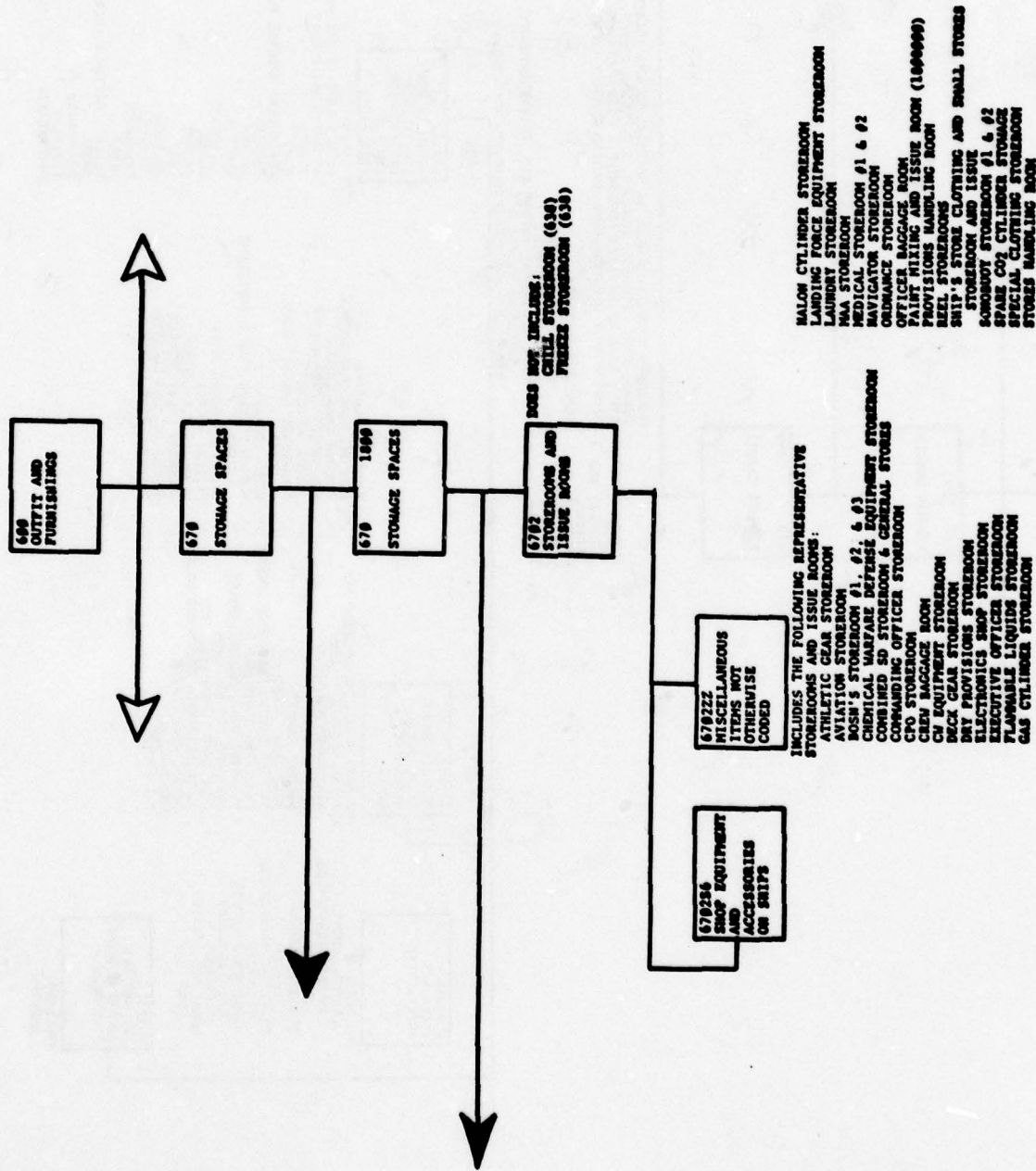
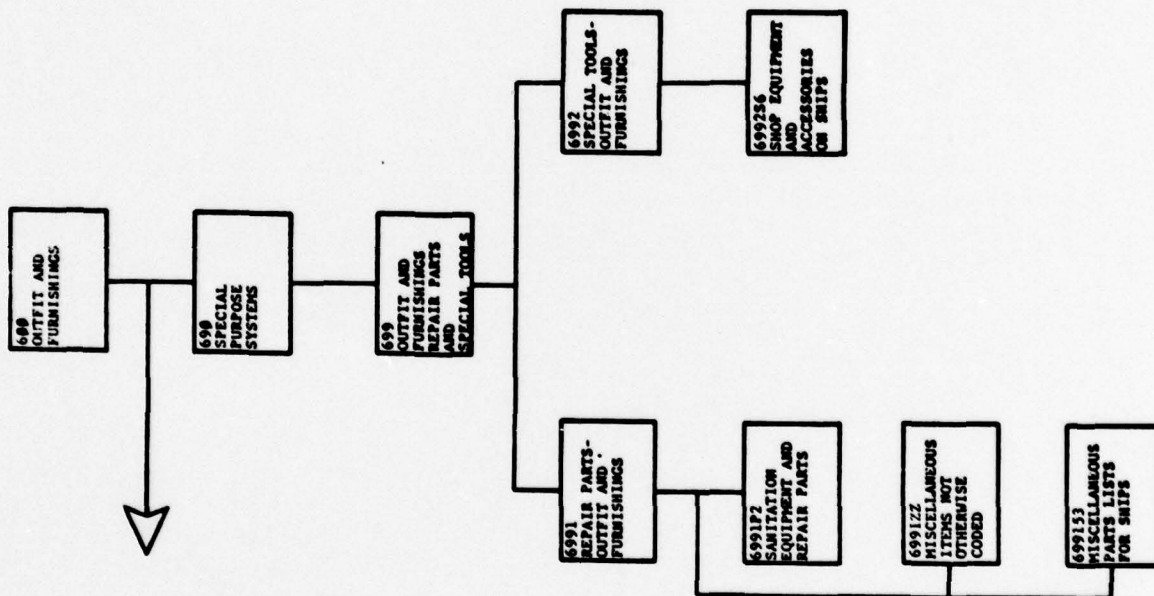


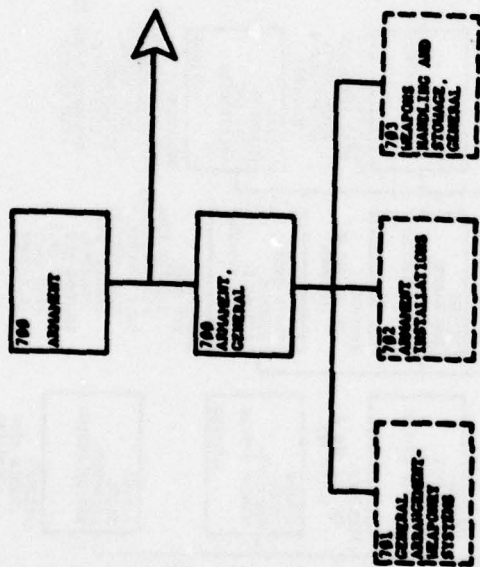
FIG-7 CLASS
PREPARED 6-29-79



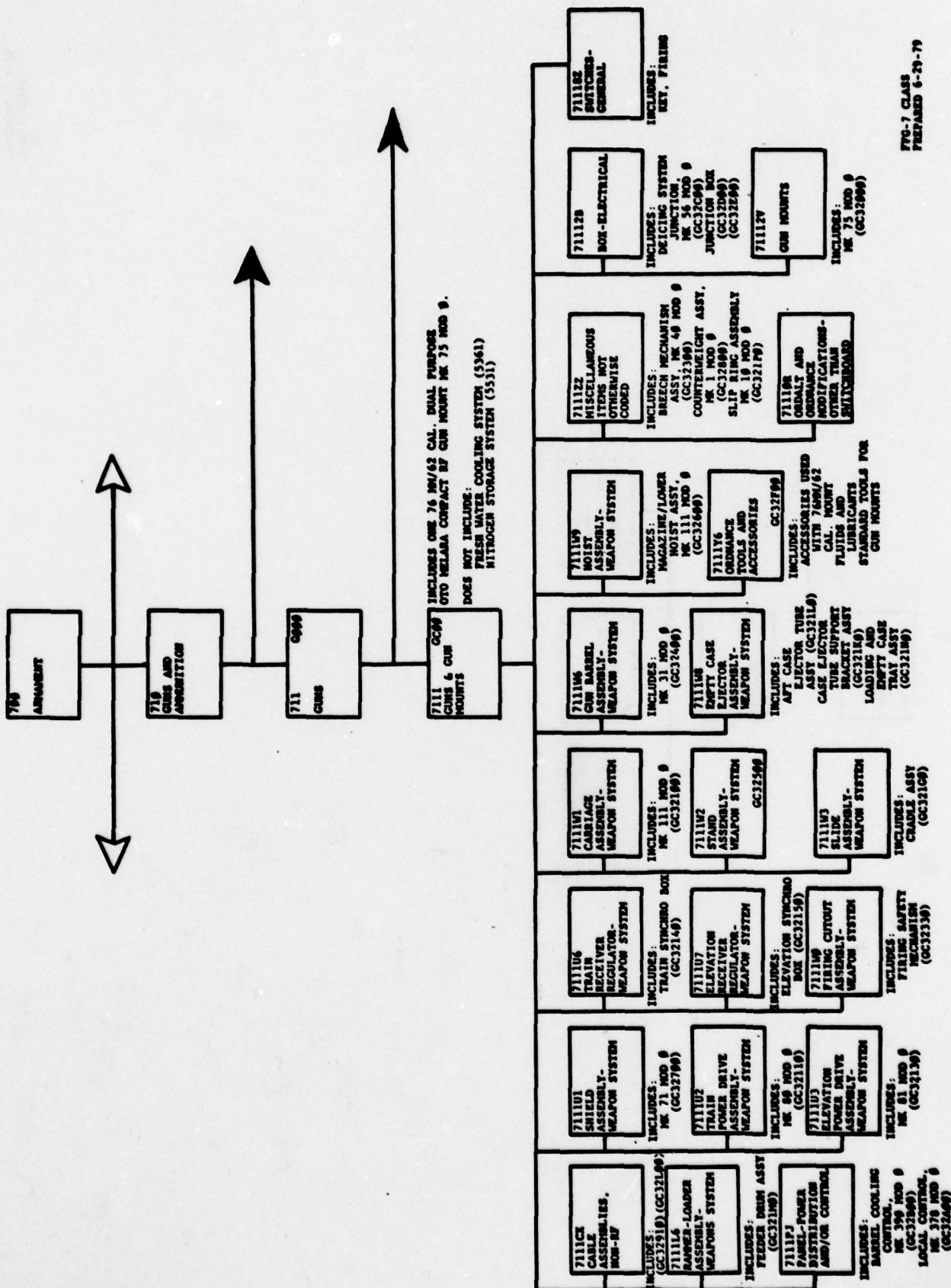




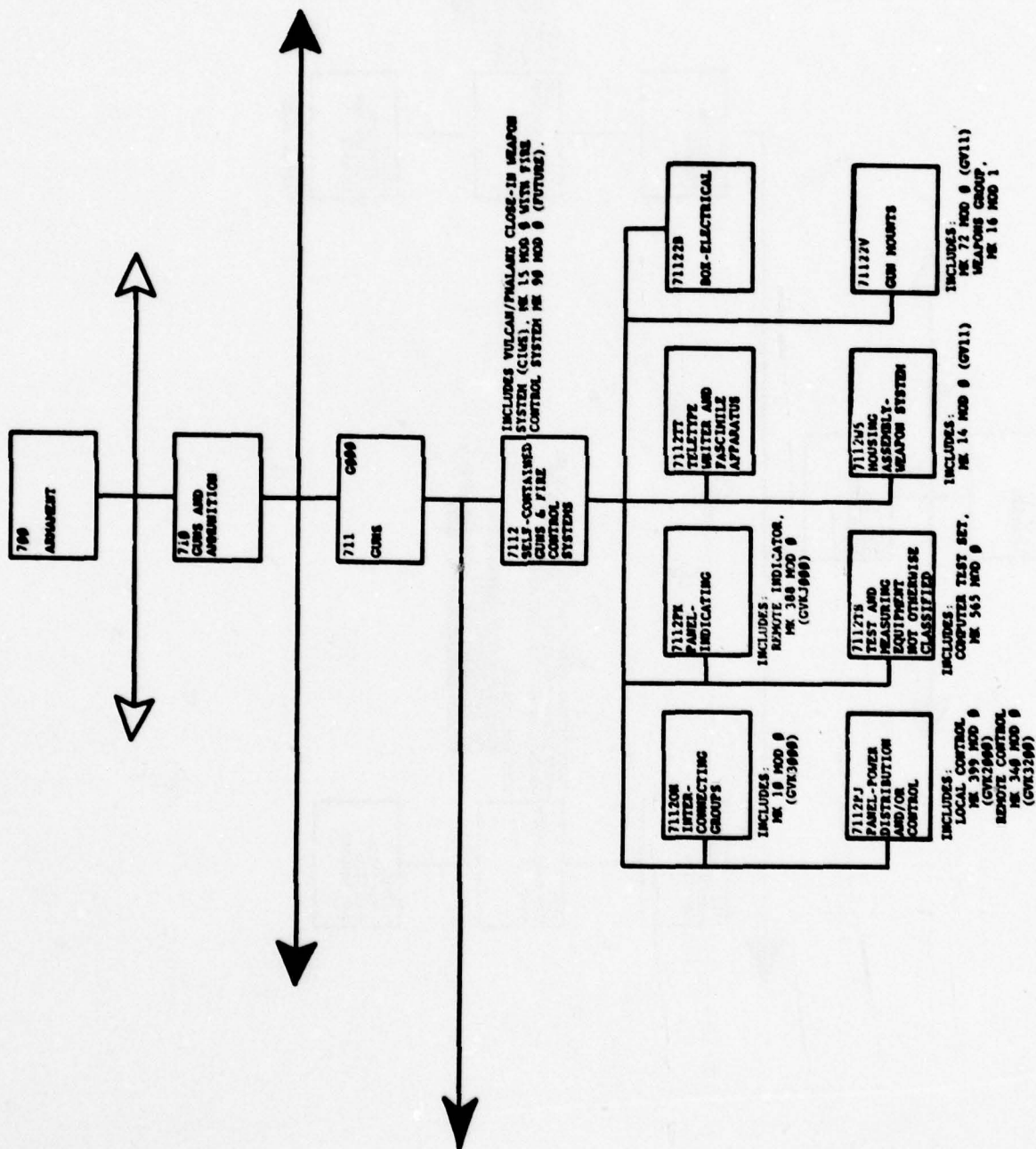
FFC-7 CLASS
PREPARED 3-1-79

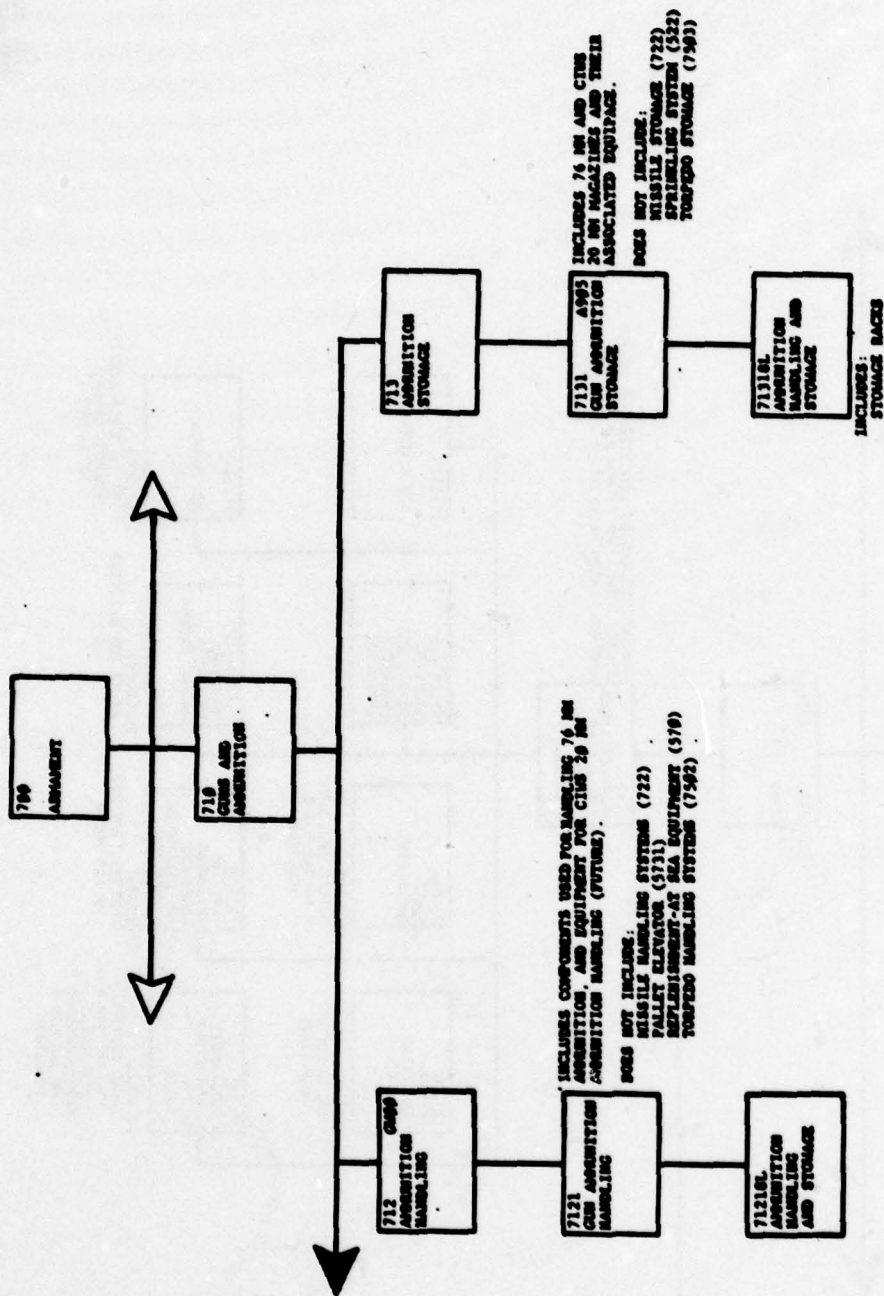


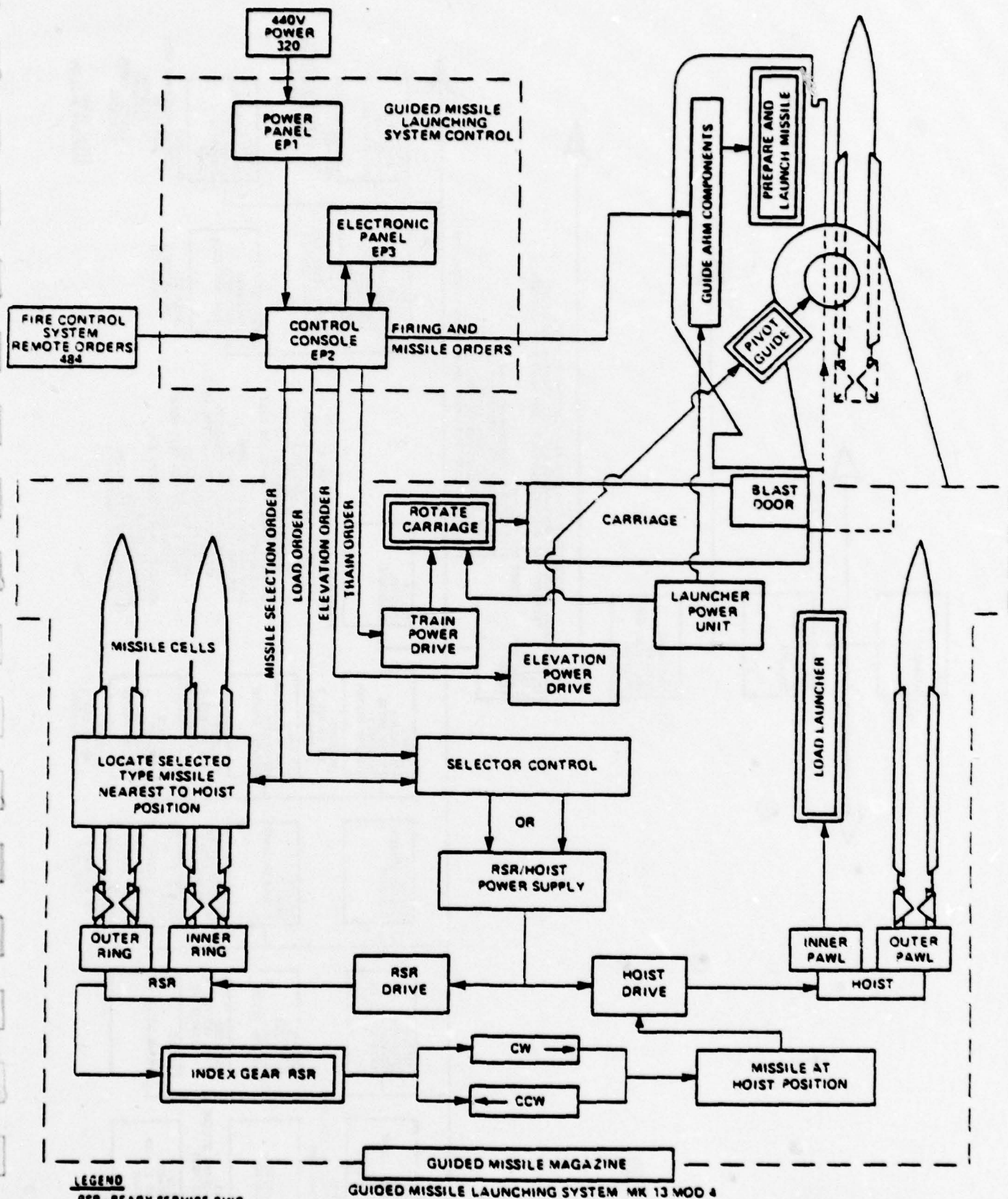
790-7 CLASS
PREPARED 3-1-79



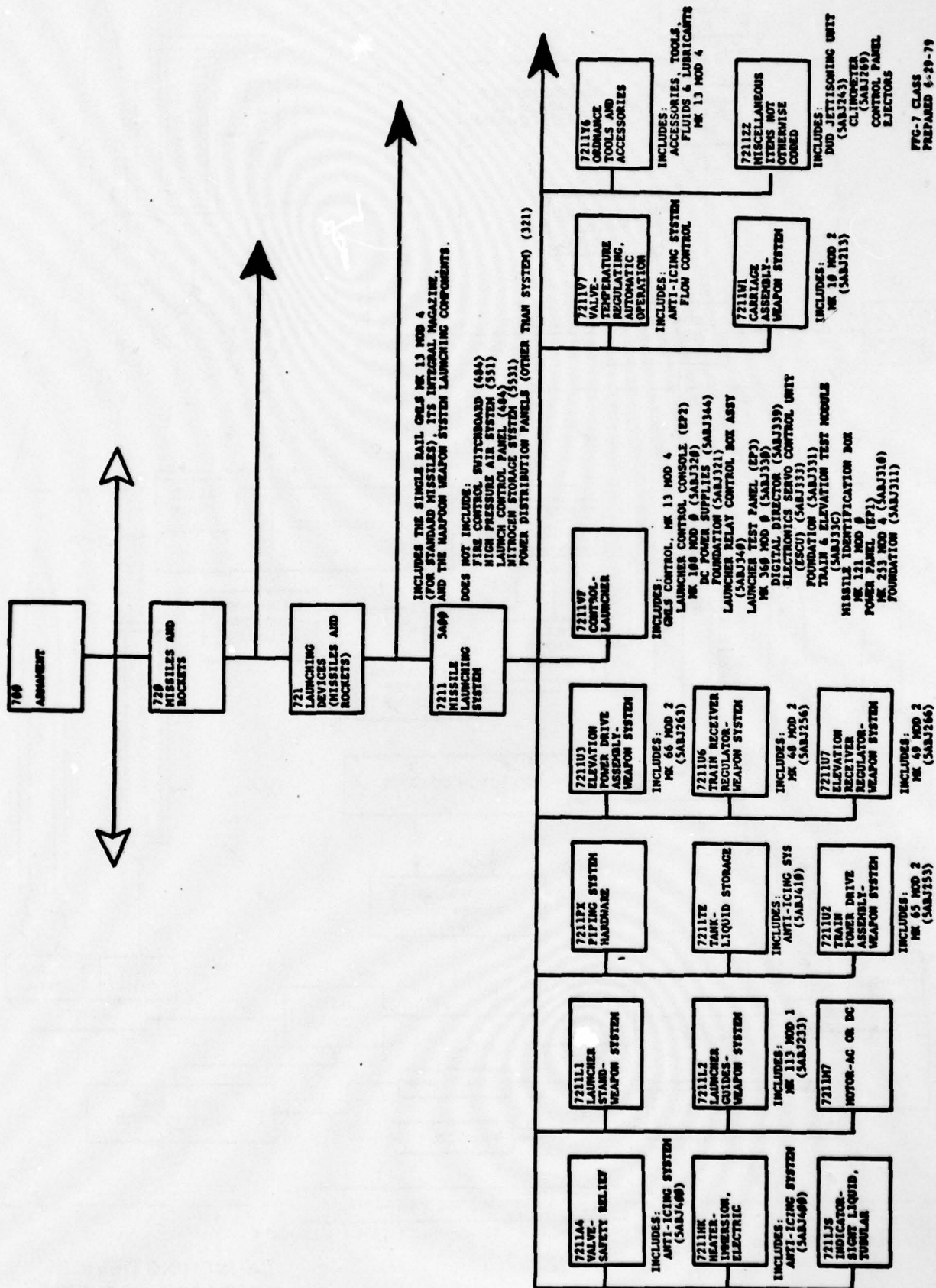
770-7 CLASS
 PREPARED 6-29-79

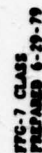




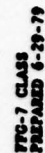


LAUNCHING DEVICES
(MISSILES & ROCKETS)
721

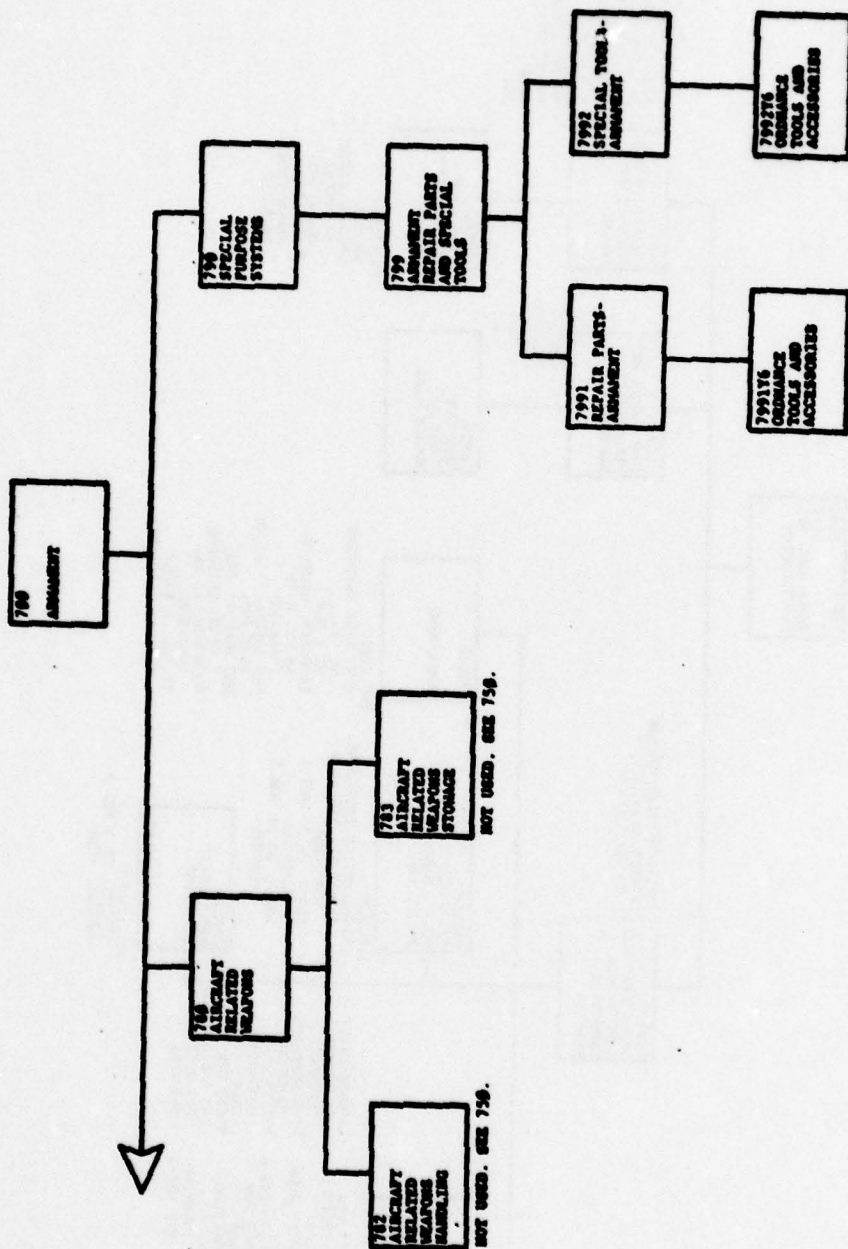


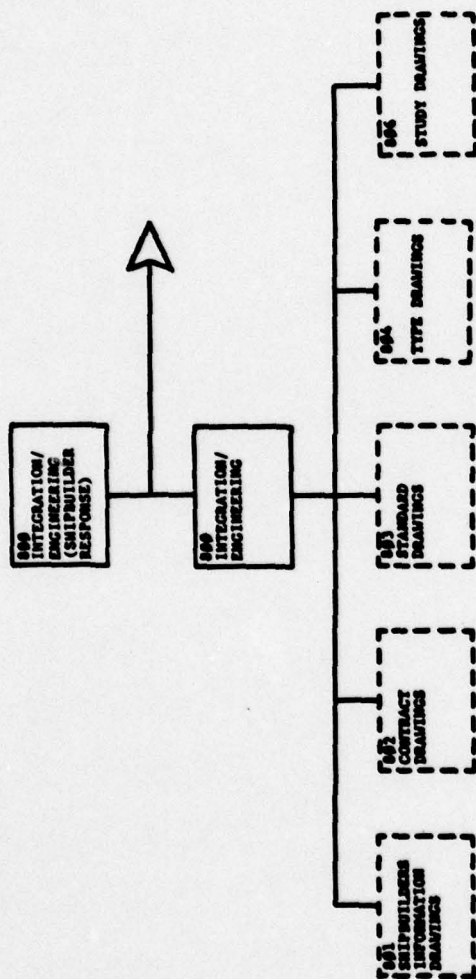












FFC-7 CLASS
PREPARED 3-1-79

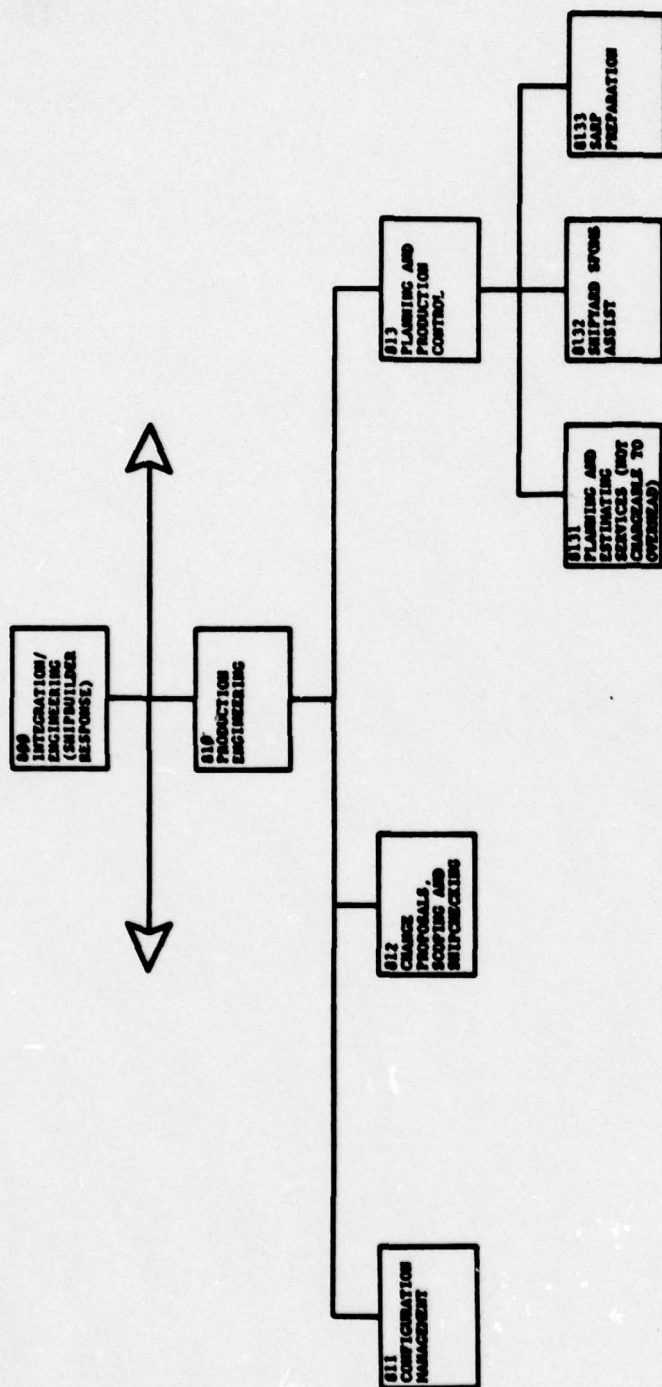


FIG-7 CLASS
PREPARED 3-1-79

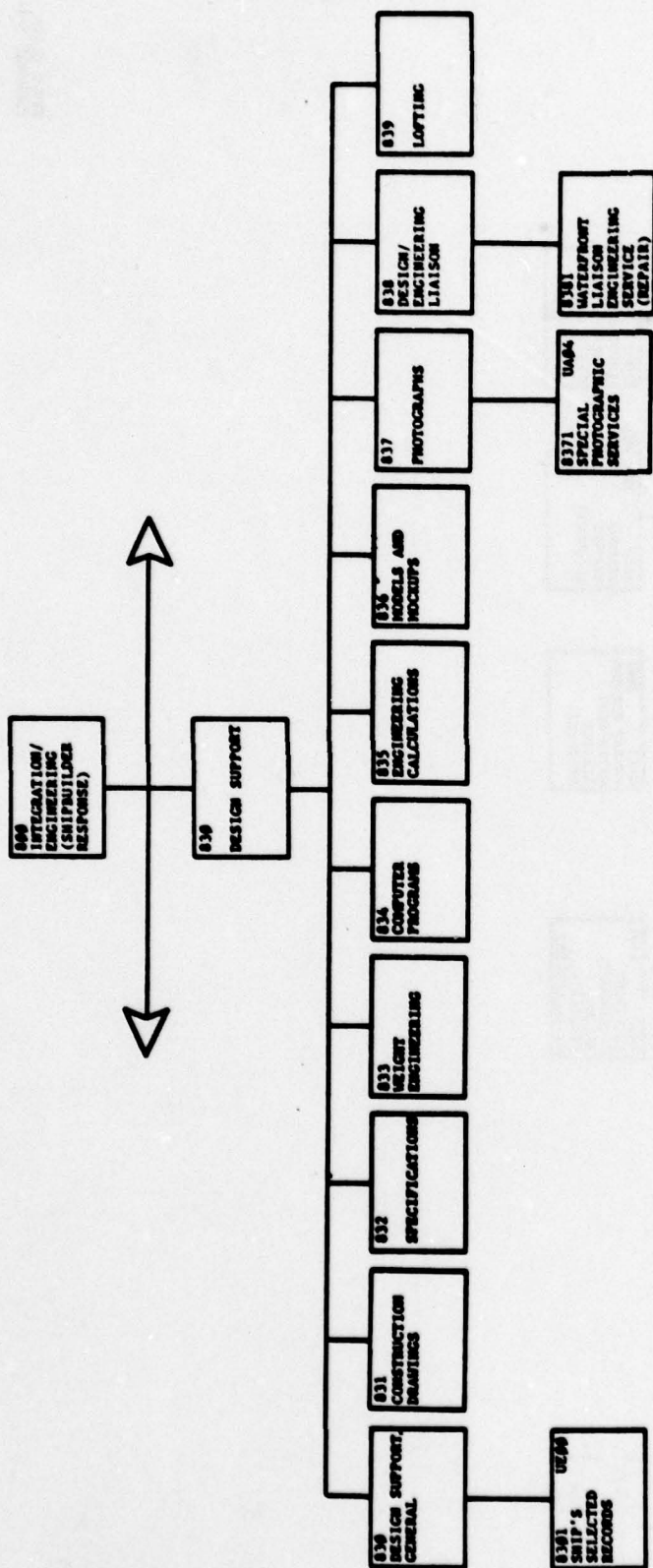


FIG. 7 CLASS
PREPARED 3-1-79

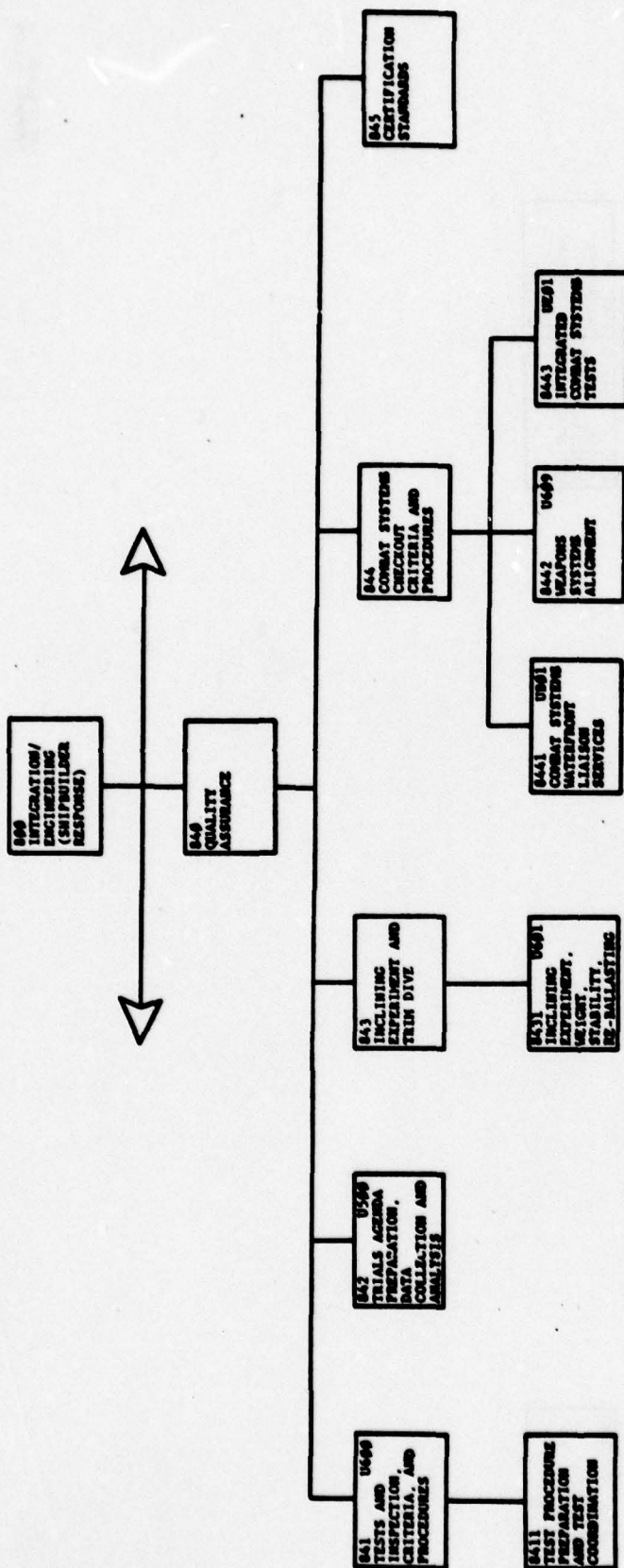
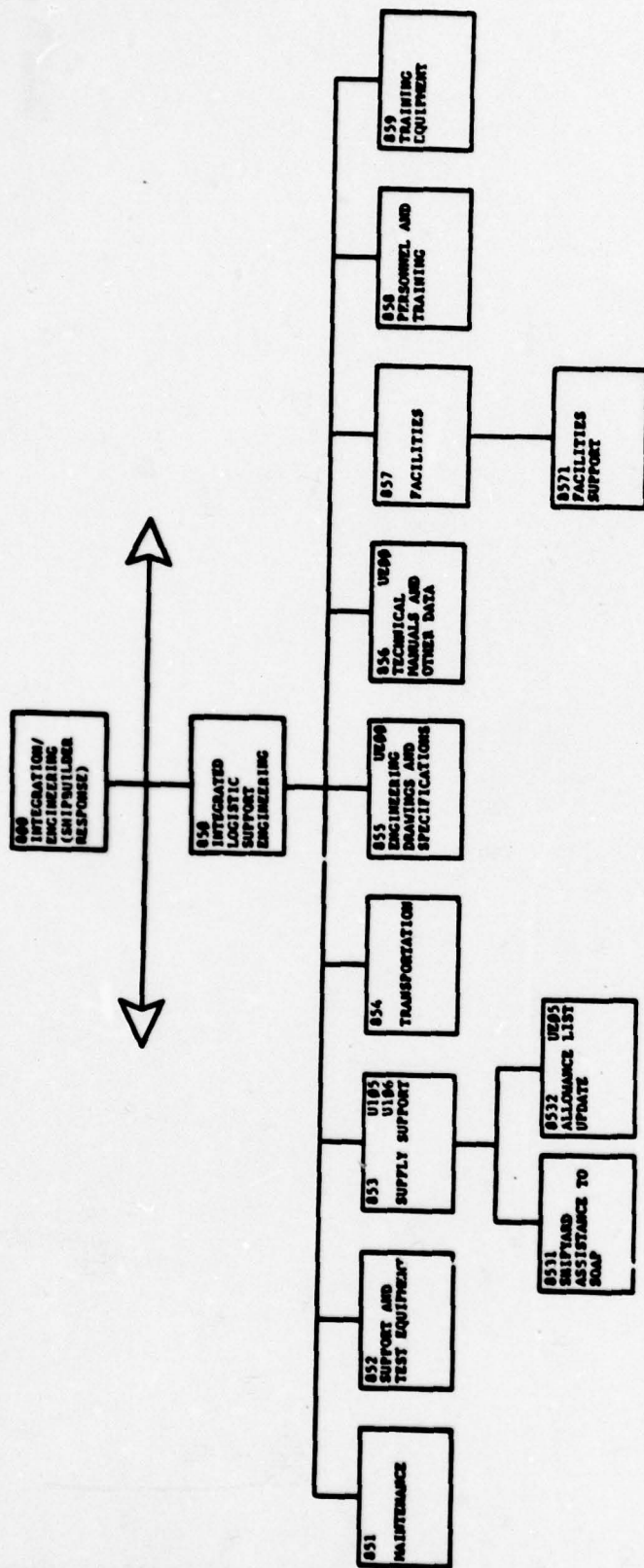
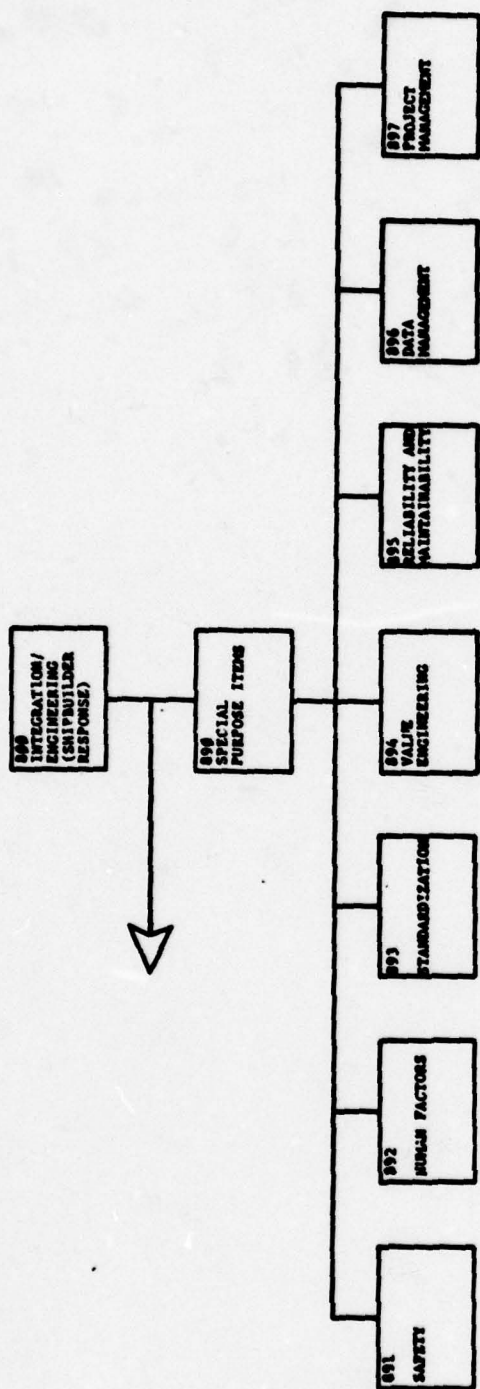
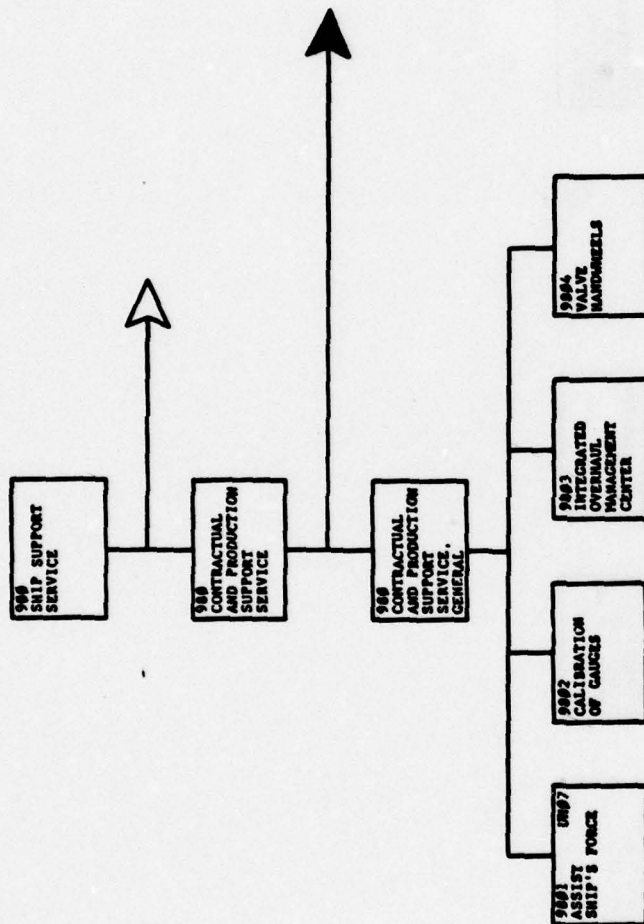


FIG-7 CLASS
PREPARED 3-1-79



PPC-7 CLASS
PREPARED 3-1-79





77C-7 CLASS
PREPARED 3-1-79

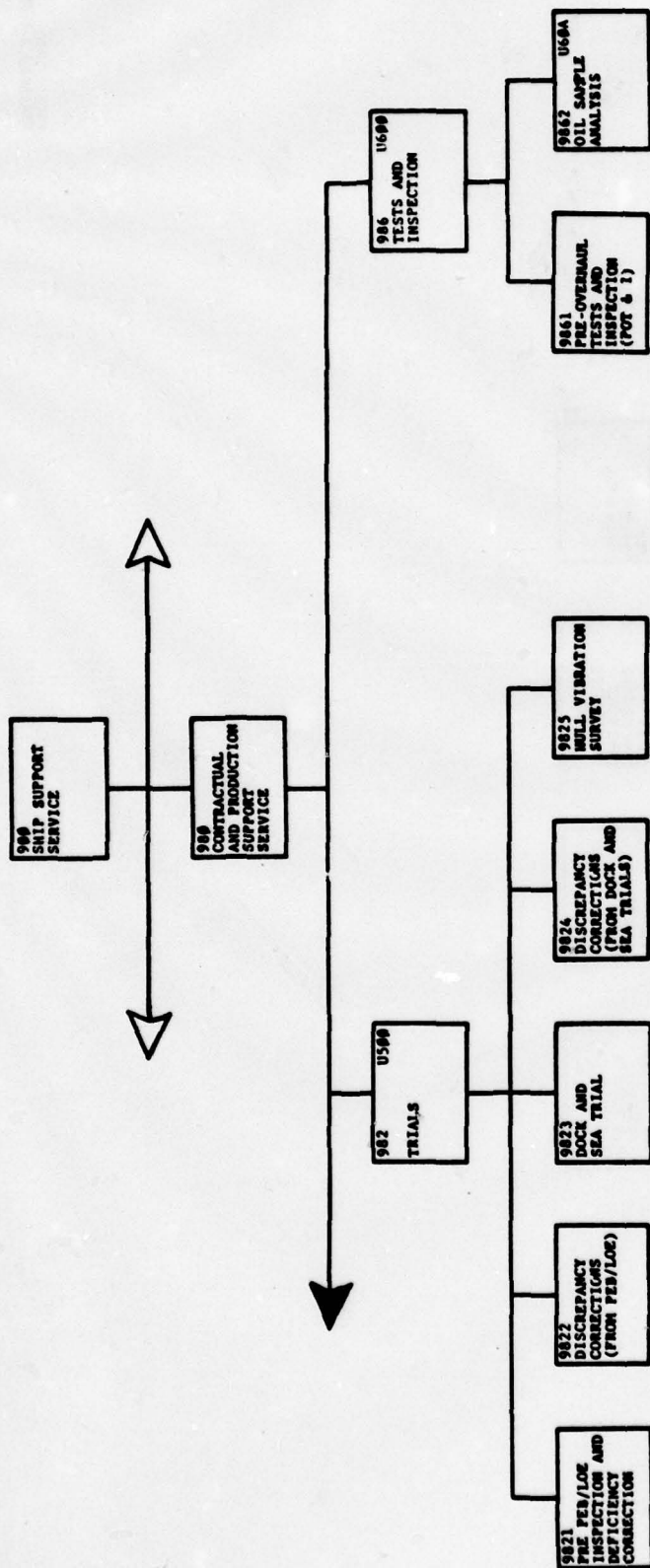
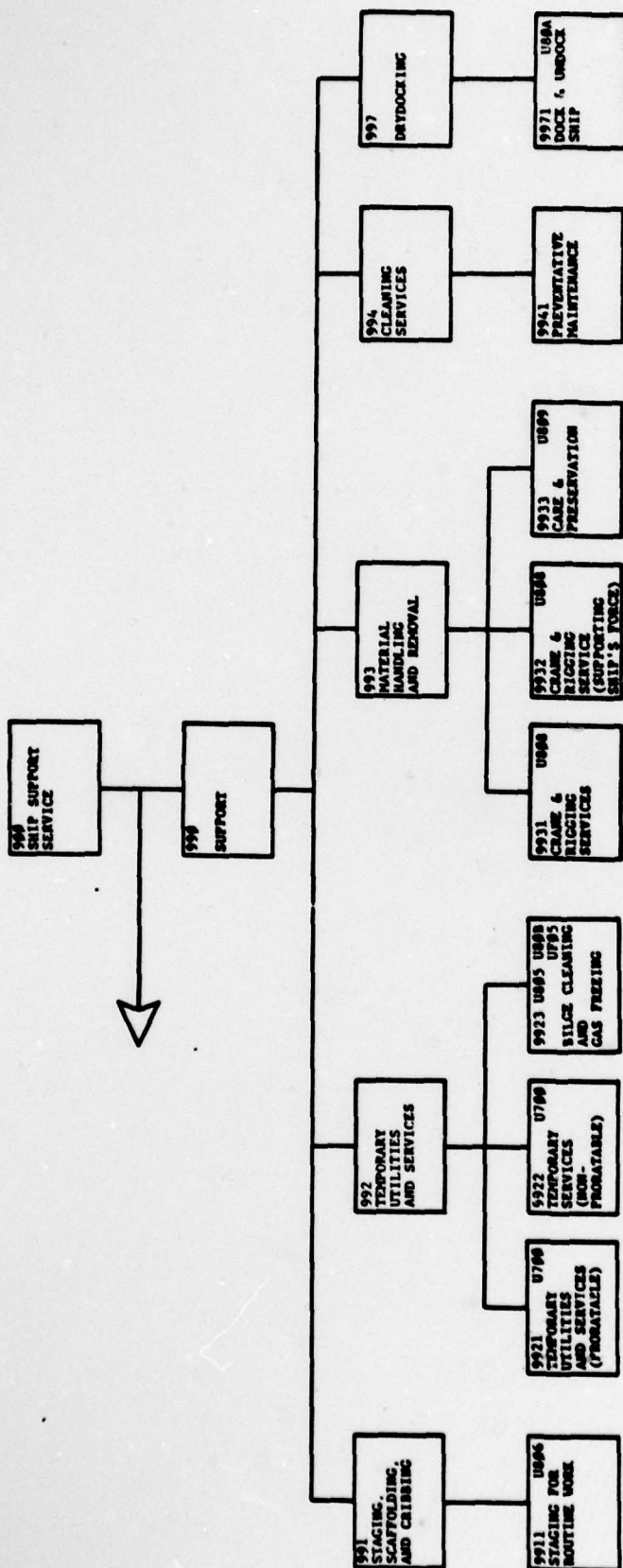


FIG-7 CLASS
PREPARED 3-1-79



APPENDIX A
COMPONENT DICTIONARY CODE LIST

APPENDIX A COMPONENT DICTIONARY CODE LIST

CDC LAPL

AA C92 ABANDON SHIP ACCESSORIES AND LIFE BOATS
 AB AB- SUPPORTS, ANTENNA (ELEX)
 AC 94-003 ACOUSTIC DEVICE-SEE ALSO CONTROL ACOUSTIC DEVICE-MINESWEEPING
 AD 02-006 BOILER-AUXILIARY, STEAM, WASTE HEAT
 AE 10-006 METER-ELECTRICAL INDICATING, AC AND DC METERS
 AF 52-013 ACTUATOR-HYDRAULIC SEE ALSO CYL-ACT LINEAR
 AG 61-265 ACTUATOR-PNEUMATIC & ELECTRO-PNEUMATIC
 AH 41-040 CUTTING MACHINE-OXYGEN ACETYLENE
 AI 31-009 CATHODIC PROTECTION EQUIPMENT
 AJ 61-273 ACTUATOR-ELECTRO MECHANICAL
 AK 85-008 ADAPTER-MISSILE HANDLING, CARGO HANDLING
 AL 41-122 AGITATOR-PAINT, SHAKER TYPE
 AM AM- AMPLIFIERS (ELEX/ORD)

 AN 33-002 AIR CONDITIONER
 AO NOT ASSIGNED
 AP 88-011 VALVE-TEMPERATURE REGULATING, STEAM CONTROL
 AQ 33-012 AIR CONDITIONER-WINDOW UNIT TYPE
 AR 09-001 CHARGER-BATTERY, AC
 AS 97-006 ANTENNA ASSEMBLY-BICONICAL OR STUB (HM&E/ELEX)
 AS AS- ANTENNAE-SIMPLE & COMPLEX (HM&E/ELEX)
 AT AT- ANTENNAE-SIMPLE (ELEX)
 AU 36-001 ALARMS & SIGNALING DEVICES-HORNS, SIRENS AND WHISTLES, AIR OR STEAM
 AV 41-006 CHARGER-MAGNET, PORTABLE
 AW 36-005 ALARMS & SIGNALING DEVICES-WHISTLE, STEAM OR AIR
 AX 41-046 CENTERING MACHINE-SINGLE SPINDLE
 AY 03-007 COOLER-AIR
 AZ 83-001 SEAL-STEMTUBE, SUBMARINE APPLICATION
 AO 88-021 VALVE-SCILER BLOW
 AI 36-003 ALARMS & SIGNALING DEVICES-BELL, BUZZER, SIREN ELECTRICAL
 A2 23-009 ALARMS & SIGNALING DEVICES-LIGHT, INDICATOR, ELECTRICAL
 A3 61-079 AMPLIFIER-MAGNETIC
 A4 89-023 VALVE-SAFETY RELIEF, INCLUDING VACUUM BREAKERS
 A5 61-082 AMPLIFIER-HYDRAULIC
 A6 822 STEERING AND DIVING TOOLS AND REPAIR PARTS
 A7 823 TOOLS AND EQUIPMENT O2N2 PLANT
 A8 23-006 ANNUNCIATOR-MECHANICAL DROP-AC
 A9 824 PERISCOPES - HOUSING FITTINGS
 BA 8A- BATTERY-PRIMARY TYPE (ELEX)
 BB 8B- BATTERY-SECONDARY TYPE (ELEX)
 BC C9-005 BATTERY-STORAGE
 BD 37-001 BEARING ASSEMBLY-STEM TUBE & STRUT
 BE 41-001 BALANCING INSTRUMENT-PORTABLE
 BF 85-037 BALL, NUT, & SCREW ASSEMBLY
 BG C4-C02 CONDENSER CHILLER-REFRIGERATION
 BH 37-011 BEARING ASSEMBLY-THRUST, PIVOTED SEGMENTAL, SINGLE OR DOUBLE
 BI 53-001 CAPSTAN-SEE ALSO MOORING ACCESSORIES
 BJ C37 MEDICAL EQUIPMENT-PORTABLE
 BK 93-011 BRAKE-PROPULSION SHAFT (REGARDLESS OF PRIME MOVER)
 BL 37-013 BEARING ASSEMBLY-THRUST AND JOURNAL WITH RESONANCE CHGR
 BM C5-C23 COOLING UNIT-AIR TURBINE DRIVEN
 BN 37-005 BEARING ASSEMBLY-LINE SHAFT
 BO NOT ASSIGNED

CDC LAPL

BP 25-042 BENCH MARK-OPTICAL
BQ 41-097 BENDING MACHINE-POWER OPERATED
BR 93-003 BLFINDER-AVIATION FUEL
BS 05-030 TURBOSUPERCHARGER-CENTRIFUGAL BOILER
BT 05-031 TURBINE-GAS
BU 02-001 BOILER-MAIN PROPULSION, HP STEAM
BV 02-005 BOILER-AUXILIARY, HOT WATER
BW 64-017 FIRE EXTINGUISHER-PORTABLE
BX 88-027 VALVE-COMPRESSOR SHUT OFF
BY C92 TOOLS AND ACCESSORIES
BZ RZ- ALARM UNITS (ELEX)
BO MINOR LANDING CRAFT AND SMALL BOATS (INCL ALL COMMODITY CLASS 72)
B1 43-024 BREAD SLICING MACHINE
B2 99-017 BREATHING APPARATUS
B3 89-001 BUOY-MESSENGER SEE ALSO UNDERWAY REPLEN ACC
B4 03-008 COOLER-AIR
B5 30-001 BURNER-CIL, PRESSURE ATOMIZING, BOILER SERVICE
B6 30-002 BURNER-CIL, PRESSURE ATOMIZING, GUN TYPE
B7 30-004 BURNER-CIL, VAPORIZING PCT
B8 30-005 BURNER-CIL, ROTARY HORIZONTAL
B9 30-007 BURNER-CATALYTIC
CA CA- COMMUTATOR ASSEMBLY-SONAR (ELEX)
CB CB- CAPACITOR BANK (ELEX)
CC 32-019 CABINET, ICE CREAM SEE ALSO REFRIGERATOR
CD 28-005 CABINET, RESOLVER CONTROL-AUTOMATIC PLOTTING
CE 41-005 CABINET, BLAST CLEANING
CF 85-038 CABLE MACHINERY-DECK
CG CG- CABLE ASSEMBLY-RF (ELEX)
CH C15 GASOLINE AND JP - FUEL SYSTEMS TOOLS AND FITTINGS
CI 43-027 CABINET, DOUGH PROOFING
CJ 54-006 CAMERA-COPYING, LITHOGRAPHIC
CK CK- CRYSTAL KITS (ELEX)
CL 99-002 CARBON DIOXIDE
CM CM- COMPARATOR (ELEX)
CN CN- COMPENSATOR (ELEX)
CO C- CONTROLS (ELEX/ORD)

CP CP- COMPUTER (ELEX/CRD)

CO 85-042 CARRIAGE/CAR/CART/TRACTOR/TRAILOR
CR CR- CRYSTALS (ELEX)
CS 05-032 CASE/ENCLOSURE-GAS TURBINE
CT 41-147 CARTON MACHINE
CU CU- COUPLER (ELEX)
CV CV- CONVERTER (ELEX/CRD)
CV CONVERTER (ELEX/CRD)
CW CW- RADOMES (ELEX)
CX CX- CABLE ASSEMBLIES, NON RF (ELEX)
CY CY- CASES AND CABINETS (ELEX)
CZ 32-003 CHILLER-WATER
CO 88-029 VALVE-REGULATING, WATER FLOW, FOR REFRIGERATION SYSTEMS
C1 76-004 CHLOPINATOR
C2 31-032 CHOCK-ROLLER, DECK AND STERN
C3 14-001 CIRCUIT BREAKER-NAVY TYPE AOB AND AOBLF
C4 14-002 CIRCUIT BREAKER-NAVY TYPE NOB AND NLB
C5 14-003 CIRCUIT BREAKER-NAVY TYPE ACB

CDC LAPL

C6 14-004 CIRCUIT BREAKER-NAVY TYPE ALB
C7 14-006 CIRCUIT BREAKER-OTHER THAN AOB, NOB, ACB, ALB TYPES
C8 41-148 CLEANING MACHINE-ALL TYPES EXCEPT BLAST CLNG CAB
C9 59-006 CLOSER-DOOR HYDRAULIC
DA DA- DUMMY LOAD (ELEX)
DB 33-007 DAMPER-ACTUATOR AND POSITIONER
DC 40-006 DAMPER-VENT, COMBUSTION CONTROL
DD 56-001 DAVITS, ALL TYPES
DE 28-003 DEAD RECKONING EQUIPMENT
DF 85-024 DEFLECTOR, JET PLAST
DG 46-012 DEGAUSSING MAGNETIC MEASUREMENT SYSTEM
DH 41-011 DEGREASER
DI D- DISPENSER-CHAFF (ELEX)
DJ 44-002 DEHUMIDIFIER-DESICCANT ELECTRIC
DK 44-009 DEHUMIDIFIER-SPACE, MECH REFRIG SELF CONTAINED
DL 32-005 DEHYDRATOR-REFRIGERATION
DM 44-001 DEHYDRATOR-FILTER, DESICCANT, HIGH PRES AIR, SELF REAC
DN 44-004 DEHYDRATOR-NON REACTIVATING
DO NOT ASSIGNED
DP 08-007 DEMINERALIZER-WATER, ION EXCHANGE
DQ 99-027 DESUPERHEATERS-ALL TYPES
DR 06-205 COMPRESSOR UNIT-AIR
DS 33-005 CAMPER-MECHANICAL EXHAUST VENTILATION SYS
DT DT- DETECTING HEADS (ELEX)
DU 54-021 DEVELOPING MACHINE-BLACK AND WHITE PROCESS
DV 43-001 DISH WASHING MACHINE
DW 41-049 DISINTEGRATING MACH-METAL, ELEC ARC
DX 32-014 DISPENSER-DRINKING WTR SEE ALSO DRNG FTN(67-006)
DY DY- DYNAMOTORS (ELEX)
DZ 32-032 DISPENSER-MECHANICALLY REFRIGERATED, MILK
DO 09-002 CHARGER-BATTERY, D.C.
D1 41-146 DISPENSER-TAPE, ELECTRIC
D2 32-031 DISPLAY CASE-MECH REF, SELF CONTND/NON-REFR
D3 06-002 COMPRESSOR-RECIPROCATING
D4 08-001 DISTILLATION UNIT
D5 52-015 DESURGER-HYDRAULIC
D6 32-027 DISPENSER-MECH REF, OTHER THAN MILK SEE CAB, ICE CR/FREEZER
D7 09-005 DISTILLATION UNIT-VAPOR COMPRESSION
D8 85-011 DOLLY-CRAT STORAGE SEE ALSO TRK/DOLLY/CRADLE ASS
D9 31-034 DOOR-ROLLER CURTAIN, SHIPBRD, HAND CR PWR OPER
EA 74-001 EDUCTOR-LIQUID
EB 49-001 CARBURETOR
EC 73-010 EJECTOR-GARBAGE AND TRASH DISPOSAL
ED 07-011 HEATER-FLUID
EE 88-031 VALVE-BURBLER
EF 73-012 EJECTOR-SIGNAL
EG 73-001 EJECTOR ASSEMBLY-AIR
EH E- HOISTS (ELEX)
EI NOT ASSIGNED
EJ 11-003 CONVERTER
EK 849 NITROGEN CHARGING ASSEMBLY
EL 59-001 ELEVATOR-ELECTRO MECHANICAL
EM 15-013 CONTROLLER-AC
EN 16-010 GENERATOR-GAS
EO NOT ASSIGNED
EP 59-002 ELEVATOR-AIRCRAFT LIFTING

CDC LAPL

EQ 41-050 EMBOSsing MACHINE-METAL & CRDBRD ALSO OFF MACH ACC
ER 15-012 BENCH-LIQUID OXYGEN CONVERTER FILL
ES 66-001 ENGINE-DIESEL. SHIP PROPULSION AND SHIP'S SERVICE. 2 & 4 CYCLE
ET 22-022 SWITCHCARD-MINESWEEPING
EU 89-037 VALVE-REFRIGERATION SHUT OFF. SMALLER THAN 3/4 IN
EV 66-005 ENGINE-DIESEL. 2 & 4 CYC. TYPE B
EW 16-014 BOOSTER-GAS
EX 66-006 ENGINE-DIESEL. NON-MAGNETIC MINESWP PROP & AUX 4 CYC
EY 66-017 ENGINE-GASOLINE AIR OR FLUID COOLED
EZ 19-007 MOTOR GENERATOR
EO 88-042 VALVE-FLCAT. LIQUID LEVEL CONTROL. REFRIGERATION SYSTEMS
E1 66-019 ENGINE-GASOLINE. BOAT PROP. OUTBOARD MOTOR
E2 66-020 ENGINE-STEAM. RECIPROCATING. MN PROP & AUX SERVICE
E3 88-044 VALVE-STEAM SEAL MANIFOLD
E4 88-045 VALVE-GUARDING
E5 41-051 ENGRAVING MACHINE PANTOGRAPH
E6 59-005 ESCALATOR
E7 09-011 EXCHANGER. ION
E8 93-001 EXPANSION JOINTS-PIPE. PACKLESS
E9 88-046 VALVE-TRIP THROTTLE
FA 40-001 FAN-VANEAXIAL AND/OR TUBEAXIAL
FB 18-009 MOTOR GENERATOR
FC 40-002 FAN-CENTRIFUGAL
FD 20-002 RHEOSTAT
FE 40-003 FAN-CIRCULATING
FF 40-009 FAN-CENTRIFUGAL. CARBON DIOXIDE REMOVAL SYS
FG 99-030 FREEDAIL-BRIDGE CRANE
FH 41-076 FILING MACHINE-SAW. BLADE
FI C56 BOILER FEEDWATER TEST AND TREATMENT
FJ 09-010 FILLER-PORTABLE BATTERY WATER
FK 48-002 FILTER-FLUID. PRESSURE
FL F- FILTER UNITS (ELEX)
FM 20-006 RHEOSTAT
FN FN- FURNITURE (ELEX)
FO NOT ASSIGNED
FP 88-048 VALVE-CROSSOVER AND MANIFOLD
FQ 43-034 FILTER-COOKING GREASE
FR FR- FREQUENCY MEASURING DEVICES (ELEX)
FS C55 FUEL OIL STOWAGE AND EQUIPMENT
FT 31-023 FITTINGS-HULL SEE ALSO TOWING-ACC. MOORING ACC
FU 24-002 FIXTURE-LIGHTING
FV 48-006 FILTER-AIR. WET OR DRY ELEMENTS
FW 76-003 FILTER-WATER PURIFICATION
FX 31-012 FLAME ARRESTER-VENTILATION
FY 54-015 FOLDING MACHINE-PAPER
FZ 43-012 GRINDERS AND CUTTERS-FOOD ELECTRICAL
FO 16-011 FURNACE ASS OXY CANDLE ROUND AND SQUARE
F1 43-059 FOOD WARMER-RADIANT. OVERHEAD. ELECTRIC
F2 41-016 FORGE-OIL BURNING ELEC OR OTHER ALSO FURNACE
F3 41-053 FORGING MACHINE-HAMMER VERTICAL
F4 41-017 FORMING MACHINE-SHEET METAL
F5 54-004 FRAME PRINTING
F6 43-006 FRYERS-DEEP FAT. ELECTRIC
F7 85-046 FUEL DISPERSING SYS
F8 41-019 FURNACE- ELECTRIC
F9 41-020 FURNACE-OIL BURNING

CDC LAPL

GA 45-003 GAGE-LIC QNTY MECHANICAL SEE ALSO INDICATOR AND METER
GB 45-004 GAGE-LIQUID QUANTITY HYDRAULIC/PNEUMATIC
GC 45-007 GAGE-PRESSURE
GD 45-009 GAGE-DEPTH SUBMARINE
GE 43-002 GALLEY EQUIPMENT-ELECTRICAL
GF 43-009 GARRAGE DISPCAL MACHINE
GG 31-005 GATE-STEM SEE ALSO DOOR OR HATCH
GH G- GENERATOR-POWER (ELEX)
GI 867 OPERATING GEAR MISCELLANEOUS REPAIR PARTS
GJ 43-047 DOUGHNUT MACHINE-CUTTING AND FRYING
GK 69-028 GEAR-TURNING/JACK DEVICE
GL 69-029 GEAR-TILTING
GM 69-006 GEAR ASSEMBLY-SPEED DECREASER, MAIN PRCP SERVICE
GN 69-016 GEAR ASSEMBLY-SPEED DECREASER, AUX SERVICE
GO GO- GONICMETERS (ELEX)
GP GP- GROUND RODS (ELEX)
GO B51 BOILER FEEDWATER SYSTEM CONTROL FITTINGS
GR 23-008 SEMAPHORE-MECHANICAL SIGNAL
GS 43-044 GALLEY UNITS-COMPACT
GT 16-006 GENERATOR-DC OR AC
GU 24-004 FIXTURE-LIGHTING FLUORESCENT
GV 24-006 FIXTURE-LIGHTING MERCURY VAPOR
GW 16-008 GENERATOR-SMOKE, MECHANICAL
GX 16-009 GENERATOR-OXYGEN/NITROGEN
GY 16-001 GENERATOR-BATTERY CHARGING
GZ 70-001 GOVERNOR-MECHANICAL
GO FUEL GELLING UNIT MIG - 10
G1 70-005 GOVERNOR-HYDRAULIC
G2 88-072 GOVERNOR-PUMP
G3 70-013 GOVERNOR-ELECTRO HYDRAULIC
G4 70-014 GOVERNOR-ELECTRIC
G5 23-004 SEARCHLIGHT-SIGNAL
G6 41-057 GRINDING MACHINE-CYCLINDRICAL
G7 41-060 GRINDING MACHINE-GLASS
G8 41-063 GRINDING MACHINE-VALVE
G9 41-065 GRINDING MACHINE-SURFACE, RECIPROCATING
HA 85-031 HANDLING GEAR-GUIDANCE CAPSULE
HB 85-045 HANGAR-AIRCRAFT
HC HC- HOLDER, CRYSTAL (ELEX)
HD HD- ENVIRONMENTAL APPARATUS (ELEX)
HE C7-002 HEATER-FLUID, FUEL OIL AND LUBE OIL, STEAM HEATED
HF C7-003 HEATER-WATER AND AIR
HG 26-015 PROJECTOR-MOTION PICTURE, SOUND, SUPER 8MM
HH 07-004 HEATER-WATER, STM/HT WTR HTD, INST, STM WTR CVTR
HI 07-001 HEATER-FLUID, SEA WATER, STEAM HEATED
HJ 07-005 HEATER-FLD, DEAERATING, BOILER FDWTR, TYPES I & II
HK C7-006 HEATER-IMMERSION, ELECTRIC
HL 07-007 HEATER-SPACE ELEC, TYP D RADIANT, TYPE T TUR, RAD PANL
HM 26-016 PROJECTOR-MOTION PICTURE, SOUND, SUPER 16MM
HN 07-013 HEATER-WTR, ELECTRIC STORAGE TYPE
HO NOT ASSIGNED
HP 07-016 HEATER-COOLANT ENGINE, OIL FIRED OR ELECTRIC
HQ 07-022 HEATER-VENTILATION, VENT DUCT, ELEC, TYP 51-61
HR 07-023 HEATER-SPACE ELECTRIC, BLOWER, TYPE B
HS H- HEAD, HAND, AND CHEST SETS (ELEX)
HT 07-017 HEATER-AIR CIRCULATING UNIT, STEAM OR HT WTR HTD

CDC LAPL

HJ 07-045 HEATING ELEMENTS-ELEMENTS-ELECTRICAL
HV 07-036 HEATING UNIT-ELEC. CONTRLD TEMP FOR STRSS RELF PRHTG
HW 58-001 HOIST-WIREROPE ELECTRIC
HX 58-002 HOIST-MANUAL
HY 58-003 HOIST-ELECTRO HYDRAULIC & ELECTRO-MECHANICAL
HZ 58-004 HOIST-CHAIN ELECTRIC
HO 61-116 HYDROSTAT. CONTRCL
HI 58-005 HOIST-PNEUMATIC
H2 58-006 HOIST-HYDRAULIC
H3 85-025 HOIST-WINDSCREEN
H4 87-009 HOIST-RODMETER. U/W LOG
H5 52-033 HOIST ASSEMBLY-CYL & RAM TYP FOR COMMUN MAST
H6 41-069 HONING MACHINE-HORIZONTAL OR VERTICAL
H7 33-010 HUMIDIFIER
H8 52-016 HYDRAULIC MECHANISM SEE ALSO MISSLE FNDG SYS-HYD
H9 31-033 HYDROFOIL ASSEMBLY
IA 64-018 FIRE EXTINGUISHING SYSTEM
IB 66-002 ENGINE-DIESEL. TWO CYCLE
IC 865 IC COMMUNICATION EQUIPMENT
ID 10- INDICATOR-VEN CATHODE RAY TUBE (ELEX/CRD)

IE 66-018 ENGINE-GASOLINE
IF 66-021 ENGINE-DIESEL. NONMAGNETIC
IG 66-022 ENGINE-DIESEL. MODEL 645
IH 69-026 GEAR ASSEMBLY-SPEED INCREASER
II 71-001 DISTRIBUTOR-IGNITION SYSTEM
IJ 73-011 EJECTOR-SEWAGE
IK 78-018 COUPLING ASSEMBLY
IL 1L- INSULATORS (ELEX)
IM 1M- INTENSITY MEASURING DEVICES (ELEX)
IN 79-003 MUFFLER-DRY
IO NOT ASSIGNED
IP 1P- INDICATORS-CATHODE RAY TUBE (ELEX)
IO 83-015 CONTROL BOARD-CONTROLLABLE PITCH PROPELLER. EMER. PITCH CONTROL
IR 91-004 LAUNDRY PRESS-COMMERCIAL
IS 859 AIR CONDITIONING REFRIGERATION TOOLS AND ACCESSORIES
IT 92-020 TANK-LUBE OIL STORAGE AND CONDITIONING ASSEMBLY
IU 94-004 ACOUSTIC DEVICE
IV 94-005 ACOUSTIC DEVICE
IW NOT ASSIGNED
IX 97-012 SUB ASSEMBLIES-PERISCOPE
IY 97-018 CAMERA ACCESSORIES-PERISCOPE
IZ 99-029 RECEIVER-FUELING PROBE
IO NOT ASSIGNED
II NOT ASSIGNED
I2 864 NAVIGATIONAL SIGNAL LIGHTS
I3 NOT ASSIGNED
I4 NOT ASSIGNED
I5 NOT ASSIGNED
I6 NOT ASSIGNED
I7 NOT ASSIGNED
I8 NOT ASSIGNED
I9 NOT ASSIGNED
JA 43-028 ICE CREAM CUP FILLING MACHINE- HAND OPERATED
JB 32-017 ICE CREAM FREEZER-PWR OPER WITH INTGRL MCH REF EO
JC 32-022 ICE MAKING MACHINE-MECH REFRIG SELF CONTAINED

CDC LAPL

JD J- INTERFACE UNITS (ELEX)
JE 32-004 ICE MAKING PLANT
JF 41-032 IMPREGNATING EQUIPMENT
JG 30-006 INCINERATOR SEE ALSO BURNER
JH 27-009 SALINITY INDICATING EQUIPMENT
JI NOT ASSIGNED
JJ 38-002 INDICATOR-TEMPERATURE, ELECTRICAL
JK 28-028 NAVIGATION EQUIPMENT
JL 38-007 INDICATOR-BOILER SMOKE
JM 38-014 INDICATOR-SALINITY & SALINITY CELL
JN 38-015 INDICATOR-PRES DIFFERTL, LIO/STM LVL, DIR OR REM
JO NOT ASSIGNED
JP 38-016 INDICATOR-MECHANICAL TACHOMETER
JQ 38-020 INDICATOR-LIO LVL, FLOW, WATER AND FUEL
JR 45-001 INDICATOR-SIGHT LIQUID, FLAT
JS 45-002 INDICATOR-SIGHT LIQUID, TUBULAR
JT 45-005 INDICATOR-METER, DIFFERENTIAL PRESSURE
JU 61-025 INDICATOR-PORTABLE SHIP CONTROL
JV 41-111 VULCANIZER - RUBBER COVERED CABLE
JW 29-001 INJECTOR- FUEL DIESEL ENGINE NOZZLE NCN-MET TYP
JX 29-002 INJECTOR-FUEL, DIESEL ENGINE, UNIT METERING AND PRES
JY 43-060 INJECTOR-RINSE AGENT FOR DISHWASHING MACHINE
JZ 887 MEASURING AND INDICATING INSTRUMENTS
JO 31-011 TENSION UNIT-HYDRAULIC RAM
J1 27-009 INTERCOMMUNICATION STATION
J2 97-002 MAST-ANTENNA
J3 97-013 MAST-SNORKEL
J4 689 NUCLEAR POWER PLANT - COOLANT DISCHARGE SYSTEM VALVE
J5 85-035 JACK ASSEMBLY-HAND, SCREW, HYDRAULIC/PNEUMATIC OPR
J6 41-034 JOINTER-WOODWORKING
J7 27-010 TELEPHONE EQUIPMENT-DIAL
J8 43-008 KETTLE-STEAM JACKETED
J9 41-070 KEY DUPLICATING MACHINE
KA 40-004 DRIER-HAND, ELECTRIC
KB 86-003 DRIER-PHOTOGRAPHIC
KC 41-014 DRILLING MACHINE-FLOOR OR BENCH
KD 43-050 TABLE-FOOD WARMER, ELECTRIC/STEAM HEATED
KE 54-014 DRILLING MACHINE-PAPER
KF 67-006 DRINKING FOUNTAIN
KG 52-001 DRIVE ASSEMBLY-ELECTRO HYDRAULIC AMMUN HOIST
KH 52-004 DRIVE ASSEMBLY-ELECTRO HYD HST, VERT TUB, 12.75RKT
KI 16-005 TACHOMETER SEE ALSO INDICATOR-MECHANIC TACHOMETER
KJ 52-007 DRIVE ASSEMBLY-ELECTROHYDRAULIC HOIST, 3000# MIS TRAV
KK 88-063 VALVE-PRESSURE REGULATING
KL 85-004 DRIVE ASSEMBLY-SLIDING BLOCK
KM 91-008 DRY CLEANING PRESS
KN 91-007 DRY CLEANING UNIT ASS-AUTO, SYNTHET SOLVENT TYPE
KO NOT ASSIGNED
KP 54-018 DRYING MACHINE BLUEPRINT
KQ 91-002 DRYING TUMBLER-LAUNDRY
KR 59-003 DUMBWAITER
KS 54-002 DUPLICATING MACHINE-OFFSET SEE ALSO CFF MACH ACC
KT 41-015 DYNAMOMETER
KU 41-131 TANK-HOT DIP
KV 92-005 TANK-DIESEL ENGINE, AIR STARTING
KW 92-001 TANK-STORAGE

CDC LAPL

KX 88-104 VALVE-STOP CHECK
KY KY- KEYING DEVICES (ELEX)
KZ 88-117 VALVE SURPLATE
K0 88-125 VALVE-PRESSURE CONTROL
K1 88-129 VALVE-PRESSURE REGULATING
K2 88-130 VALVE-HYDRAULIC CONTROL
K3 01-010 PUMP, ROTARY PISTON, FIXED OR VARIABLE DELIVERY
K4 88-134 VALVE-SHUTTLE
K5 88-135 VALVE-HYDRAULIC
K6 88-138 VALVE-CHECK, INLINE, UNDER \$25.00
K7 01-025 PUMP, PORTABLE SUBMERSIBLE
K8 88-142 VALVE-CHECK, INLINE, \$25.00 AND ABOVE
K9 88-158 VALVE-TEST CASTING
LA 24-009 LANTERN-ELECTRIC, BATTERY TYPE
LB 41-036 LATHE-METAL WORKING
LC LC- TOOLS-LINE CONSTRUCTION (ELEX)
LD 91-012 LAUNDRY EQUIPMENT
LE 23-002 LIGHT-INDICATOR
LF 24-008 LIGHT-NAVIGATIONAL MARINE
LG 54-024 LIGHT-ARC PHOTOLITHOGRAPHIC
LH 16-015 LIQUIDIFIED GAS STORAGE AND CHARGING SYS
LI NOT ASSIGNED
LJ 54-007 LITHOGRAPHIC, NEGATIVE AND PLATE MAKING
LK 99-020 LOCK-ELECTROMECHANICAL
LL 28-018 LOCKER-BINOCULAR DRYING
LM 26-013 LOUSPEAKER-MOTION PICTURE PROJECTOR
LN 65-001 LUBRICATOR-MECHANICALLY OR HAND OPERATED
LO NOT ASSIGNED
LP 65-002 LUBRICATOR-AIR OPERATED
LO C16 LADDERS AND ACCESS CLOSURE EQUIPMENT
LR 845 LUBE OIL PIPING SYSTEM REPAIR PARTS
LS LS- LOUSPEAKERS (ELEX)
LT 41-037 LATHE-WOODWORKING
LU 88-159 VALVE-DISTRIBUTOR LUBRICATION
LV 41-141 UNDERCUTTER - ARMATURE, MICA, ELECTRICAL OPERATED
LW C20 UNDERWAY REPLENISHMENT TOOLS AND ACCESSORIES
LX 32-008 UNION TUBE - REFRIGERATION
LY 43-005 URNS -COFFEE
LZ 88-162 VALVE-SHEARING
LO 88-169 VALVE-LINE BLIND
L1 LAUNCHER STAND-WEAPON SYSTEM
L2 LAUNCHER GUIDES-WEAPON SYSTEM
L3 TRAIN ASSEMBLY-WEAPON SYSTEM
L4 ELEVATION ASSEMBLY-WEAPON SYSTEM
L5 AMPLIFIER, POWER DRIVE-WEAPON SYSTEM
L6 RAMMER-LOADER ASSEMBLY-WEAPON SYSTEM
L7 88-170 VALVE AND TRAP MANIFOLD
L8 88-177 VALVE-SPECIAL STOP CHECK
L9 88-186 VALVE-FLOW FUSE
MA MA- MAGAZINE-MAGNETIC TAPE OR WIRE (ELEX)
MB 68-001 MAGNETO-IGNITION
MC 32-006 MANIFOLD-REFRIGERATION
MD MD- MODULATORS, DEMODULATORS, AND DISCRIMINATORS (ELEX)
ME ME- METERS (ELEX)
MF MF- MAGNETS OR MAGNETIC FIELD GENERATORS (ELEX)
MG 45-008 MANOMETER-U TUBE AND OTHER TYPES

CDC LAPL

MH 91-006 MARKING MACHINE-LAUNDRY
MI *- MICROPHONES (ELEX)
MJ 85-030 MAST-HINGED
MK MK- MISCELLANEOUS KITS (ELEX)
ML ML- METEOROLOGICAL DEVICES (ELEX)
MM 43-016 MEAT SLICING MACH-ELEC & MANUAL SEE ALSO FOOD CUTTER
MN 43-021 MEAT TENDERIZER-ELECTRIC
MO NOT ASSIGNED
MP 10-001 METER-VOLUMETRIC, POS DISPL.FUEL CIL,WTR,GAS,JP-S,AL T
MQ 10-002 METER-FLOWRATE INDICATING, FLOAT TYPE RCTAMETER
MR 10-003 METER-IMPELLER TYPE LIQUID VELOCITY
MS 10-004 METER-VENTURI TYPE
MT MT- MOUNTINGS (ELEX)
MU MU- MEMORY UNITS (ELEX)
MV 41-042 MILLING MACHINE-HORIZONTAL
MW 41-043 MILLING MACHINE-WOODWORKING, VERTICAL, RCRING
MX MX- MISCELLANEOUS EQUIPMENT (ELEX)
MY 41-038 MIXER-LIQUID, PORTABLE
MZ 43-004 MIXING MACHINE-ELECTRIC, FOOD AND FLUID
MO 29-031 SEXTANT, MARINE
M1 43-035 MOLDING MACHINES-MEAT, FISH
M2 C26 ANCHORING AND MOORING APPLIANCES
M3 41-088 MORTISER-HOLLOW CHISEL
M4 17-023 MOTOR-AC/DC 0.25 HORSEPOWER AND SMALLER
M5 31-039 SONAR OCME WINDOW SYSTEM
M6 10-005 METER-FLOWRATE INDICATING, VANE TYPE
M7 17-001 MOTOR-AC OR DC
M8 31-040 TENSIONING DEVICE-TORSION BAR
M9 E32 MISCELLANEOUS FLAG ALLOWANCES, OFFICE MACHINES
NA 32-021 CARBONATOR-SCOA FOUNTAIN
NB 13-013 TRANSFORMERS-REPAIRABLE AND NON-REPAIRABLE
NC 32-025 ICE CREAM FREEZER
ND 33-004 CHILLER-WATER, AIR CONDITIONING
NE 61-080 AMPLIFIER-ELECTRONIC
NF 52-005 TRANSMISSION-HYDRAULIC, FIXED OR VARIABLE DELIVERY SEE ALSO POWER UNIT
NG 69-011 TRANSMISSION-MECHANICAL
NH 27-005 TRANSMITTER-MECHANICAL
NI NOT ASSIGNED
NJ 27-006 TXMTR-LIC LVL AND/OR FLOW,CAP,FLOAT,IND,RADIOACT,RES AND SONIC TYPE
NK 27-021 TRANSMITTER-LIQUID LEVEL, ELECTRICAL
NL 28-024 TRANSMITTER-NAVIGATIONAL
NM 61-055 TRANSMITTER-TEMPERATURE SEE ALSO INDICATOR - TEMPERATURE,ELEC RESIST
NN 27-001 TRANSMITTER/INDICATOR-ELECTRICAL TRANSMITTER TYPES
NO NOT ASSIGNED
NP 54-022 PRINTING MACHINE-BLUEPRINT
NQ 85-043 STAND-MISSILE
NR 88-192 VALVE-PRESSURE REGULATING, HIGH PRESSURE AIR
NS STEEL PLATE
NT 88-193 VALVE-FLOW CONTRL
NU 88-201 VALVE-OFFICE
NV 77-001 TRAP-STEAM AND/OR AIR
NW 37-016 BEARING-JOURNAL, PIVOTED PAD/SHOE
NX 38-021 INDICATING SYSTEM-LIQUID LEVEL, PNEUMATIC
NY 41-002 BALANCING MACHINE-DYNAMIC, STATIC, HCRIZONTAL
NZ 41-031 MACHINE-HOSE ASSEMBLY, REPAIR AND CUTOFF
NO 93-004 NOZZLE-PRESSURE FUEL SERVICING

CDC LAPL

N1 C24 NAVIGATION EQUIPMENT AND ACCESSORIES
N2 28-027 NAVIGATION EQUIPMENT-PLOTTING SYS SEE ALSO PLTG TABLE
N3 28-026 NAVIGATION EQUIPMENT-DEAD RECKONING EQUIPMENT
N4 28-001 NAVIGATION PLOTTING BOARDS
N5 28-011 NAVIGATIONAL CLOCKS
N6 31-041 DOOR-HINGED-HAND OPERATED
N7 64-001 NOZZLE-FIRE HOSE SEE ALSO DAMAGE CONTROL ACC
N8 64-003 NOZZLE-MONITOR TYPE
N9 64-004 NOZZLE-WATER QUENCH
CA 0A- MISCELLANEOUS GROUPS (ELEX)
OB 0B- MULTIPLEXER AND/OR DEMULTIPLEXER GROUPS (ELEX)
OC 0C- OCEANOGRAPHIC DEVICES (ELEX)
OD 0D- INDICATOR GROUPS (ELEX/CRC)

OE 0E- ANTENNA GROUPS (ELEX)
OF 0F- ADAPTER GROUPS (ELEX)
OG 0G- AMPLIFIER GROUPS (ELEX)
OH 0H- SIMULATOR GROUPS (ELEX)
CI C- OSCILLATORS (ELEX)
OJ 0J- CONSOLES AND CONSOLE GROUPS (ELEX/CRC)

OK 0K- CONTROL GROUPS (ELEX/CRC)
OL 0L- DATA ANALYSIS AND DATA PROCESSING (ELEX)
OM 0M- MODULATOR AND/OR DEMODULATOR GROUPS (ELEX)
ON 0N- INTERCONNECTING GROUPS (ELEX)
OO NOT ASSIGNED

OP 0P- POWER SUPPLY GROUPS (ELEX/CRC)
OQ 0Q- TEST SET GROUPS (ELEX)
OR 0R- RECEIVER GROUPS (ELEX)
OS 0S- OSCILLOSCOPE-TEST (ELEX)
OT 0T- TRANSMITTER GROUPS (ELEX)
OU 0U- CONVERTER GROUPS (ELEX)
OV 0V- GENERATOR GROUPS (ELEX)
OW 0W- TERMINAL GROUPS (ELEX)
OX 0X- CODER, DECODER, INTERROGATOR, TRANSPONDER GROUPS (ELEX)
OY 0Y- RADAR SET GROUPS (ELEX/CRC)

OZ 0Z- RADIO SET GROUPS (ELEX)
CO NOT ASSIGNED
O1 99-A01 NR-1 SUBMERSIBLE RESEARCH SHIP
O2 99-A02 ATS-1, 2, 3 (UNITED KINGDOM)
O3 99-A03 ORDNANCE FIRE CONTROL SWITCHING EQUIPMENT (HM&E/CRC)

O4 99-A04 DEEP DIVING SUBMERGENCE SYSTEM
O5 99-A05 OCEANOGRAPHIC COMPONENTS
O6 TRANSCEIVER GROUPS
O7 SONAR SET GROUPS
O8 97-003 ANTENNA SYSTEM-FLOATING WIRE
O9 97-004 ANTENNA SYSTEM-HELICAL, LOOP OR WHIP
PA 50-033 PANEL-REMOTE VALVE OPERATING
PB 88-203 VALVE-MIXING, REFRIGERATION, AIR CONDITIONING AND COOLING
PC 50-001 PANEL-FUSE
PD 0D- PRIME DRIVERS (ELEX)
PE 50-005 PANEL-COMMUNICATION

CDC LAPL

PF PF- FITTINGS-POLE (ELEX)
PG PG- PIPECN ARTICLES (ELEX)
PH PH- PHOTOGRAPHIC ARTICLES (ELEX)
PI 97-011 PERISCOPE-STACIMETER
PJ 50-010 PANEL-POWER DISTRIBUTION AND/OR CONTROL (HM&E/ORD)

PK PANEL-INDICATING (HM&E/ORD)
PK 50-025 PANEL-INDICATING (HM&E/ORD)
PL PL- PLUG-IN UNITS (ELEX)
PM 41-072 PAPER SHREDDING MACHINE SEE ALSO OFF MACH ACC
PN 25-004 PELORUS STAND SEE ALSO NAVIGATION EQUIPMENT ACC
PO NOT ASSIGNED
PP PP- POWER SUPPLY-ACROTATING MACHINE TYPE (ELEX)
PQ 97-008 PERISCOPE-COLLIMATOR
PR 97-009 DEPLUMERS, FAIRINGS AND SUPPORTS FOR SUBMARINE PERISCOPES AND MASTS
PS 50-009 PANEL-ALARM
PT PT- MAPPING AND PLOTTING UNITS (ELEX)
PU PU- POWER SUPPLY-ROTATING (ELEX)
PV 41-047 CLEANING MACHINE-CLOCK AND WATCH
PW 41-073 PINKING MACHINE
PX 848 PIPING SYSTEM HARDWARE
PY 41-091 PLANER-METAL CUTTING
PZ 97-010 PERISCOPE-SEXTANT
PO 11-009 POWER SUPPLY-AN/SQS-26 SONAR
PI 28-029 PLOTTING TABLE, MK NC2 MOD0.2 & 3 SEE ALSO NAVIG EQ (HM&E/ORD)

P2 836 SANITATION EQUIPMENT AND REPAIR PARTS
P3 27-011 PNEUMATIC TUBE SYSTEMS-COMMUNICATION
P4 41-093 POLISHER-METALLURGICAL
P5 41-095 POSITIONER-WELDING
P6 41-094 POT-MELTING, ELEC
P7 97-001 PERISCOPE-SUBMARINE
P8 11-001 POWER SUPPLY-METALLIC RECTIFIER OR SEMICONDUCTOR DIODE TYPE
P9 41-008 CLEANER-STEAM PRESSURE JET
QA 54-010 PRINTING MACHINE-HEAT DEVELOPING
QB 54-005 PRINTING PRESS-OFFSET
QC 54-008 PRINTING PRESS-LETTER PRESS
QD 54-019 PRINTING PRESS-LETTER
QE 54-025 PRINTING PRESS-PROOF
QF 99-028 PROBE AND CARRIER-FUELNG SEE ALSO FUEL CIL SYS ACC
QG 54-017 PROCESSING MACHINE-BLUE PRINT
QH 86-013 PROCESSING MACHINE-PHOTOGRAPHIC FILM
QI NOT ASSIGNED
QJ 61-117 PROGRAM CONTROLLER
QK 26-001 PROJECTION EQUIPMENT-MOTION PICTURE
QL 26-002 PROJECTION EQUIPMENT-STILL PICTURE
QM 83-030 PROPELLER ASSEMBLY-CONSTANT PITCH
QN 64-007 RECHARGING UNIT-CO2 PUMPING METHOD
QO NOT ASSIGNED
QP 89-002 RESCUE CHAMBER AND RECOMPRESSION TANK
QO 55-002 REELING MACHINE-HOSE
QR 32-039 REFRIGERATION SYSTEM-ABSORPTION
QS 83-034 PROPELLER ASSEMBLY-CONTROLLABLE PITCH
QT 64-008 PROPORTIONER-FOAM LIO SEE ALSO DAMAGE CONTRL ACC
OU 83-043 PROPULSION DRIVE UNIT-STEM
OV 01-038 PUMP UNIT-PUMP AND ACCESSORIES INSTALLED AS A UNIT

CDC LAPL

CW 88-213 VALVE-OVERFLOW
OX 01-011 PUMP-CENTRIFUGAL, POWER DRIVEN
OY 32-023 REFRIGERATION-MECHANICAL
OZ 42-001 REGULATOR-ELECTRICAL (EXCEPT ENGINE GENERATOR)
Q0 88-231 VALVE-CROSS
Q1 01-017 PUMP-CENTRIFUGAL, POWER DRIVEN, CLOSE-COUPLED OR COUPLING DESIGN
Q2 88-245 VALVE-DIRECTIONAL INTERLOCK
Q3 88-248 VALVE-PILOT, PNEUMATIC OPERATED
Q4 01-001 PUMP-CENTRIFUGAL, BOILER FEED
Q5 88-249 VALVE-CONTROL THERMAL
Q6 41-048 CLEANING MACHINE-ELECTRIC AND OILBURNING
Q7 88-251 VALVE-LOW PUMP SECTION, SAFETY TRIP
Q8 88-252 VALVE-CONTROL AIR
Q9 01-014 PUMP-HAND DRIVE, OSCILLATING, RECIPROCATING OR ROTARY
RA 58-007 RACK-READY SERVICE
RB 52-029 RAM-HYDRAULIC
RC RC- REELS (FLEX)
RD RD- RECORDER/REPRODUCERS (ELEX)
RE RE- RELAY ASSEMBLY UNITS (ELEX/ORD)

RF RF- RADIO FREQUENCY COMPONENTS (ELEX)
RG RG- CABLES, RF BULK-(ELEX)
RH 16-013 RECONDENSER SYSTEM-NITROGEN AND OXYGEN
RI 934 COMMISSARY EQUIPMENT
RJ 32-007 REFRIGERATION PURGE UNIT
RK 46-010 RECORDER-PNEUMATIC AND ELECTRO-PNEUMATIC
PL RL- REELING MACHINES (ELEX/ORD)

RM 41-084 CLEANING MACHINE-TANK
RN 55-003 REEL-HOSE
RO RO- RECORDERS (ELEX/ORD)

RP RP- REPRODUCERS (ELEX)
RQ 32-029 REFRIGERATED TANK-FILM PROCESSING
RR RR- REFLECTORS-EXCEPT ANTENNA REFLECTORS (ELEX)
RS 32-001 REFRIGERATION SYSTEM-MECHANICAL
RT RT- RECEIVER & TRANSMITTER (ELEX)
RU C88 DAMAGE CONTROL EQUIPMENT AND ACCESSORIES
RV R- RECEIVERS (ELEX)
RW 42-002 REGULATOR-ENGINE GENERATOR, BATTERY CHRG, ELECTROMECH
RX 42-007 REGULATOR-ENGINE GENERATOR, BATTERY CHRG, ELEX
RY 42-100 REGULATOR-PRESSURE
RZ 42-101 REGULATOR-FLOW, BOILER FEED WATER
R0 88-253 VALVE-LINEAR DIRECTIONAL CONTROL WITH ACTUATOR
R1 42-102 REGULATOR-FLOW, FLOAT OPERATED, DRAIN/MAKE-UP VALVE
R2 42-104 REGULATOR-PRESSURE OXYGEN SERVICE
R3 99-004 RECEPTACLE ASSEMBLY-CO2 ABSORBENT
R4 41-067 GRINDING MACHINE-UTILITY
R5 20-003 RESISTOR-VARIABLE
R6 20-004 RESISTOR-FIXED
R7 41-104 REWINDING AND INSULATION MACHINES
R8 20-001 RHEOSTAT
R9 88-254 VALVE-REGULATING, COMPRESSED GAS
SA SA- SWITCHING UNITS (ELEX)
SB SB- SWITCHBOARDS (ELEX)
SC 41-112 SANDER-BELT, DISK AND SPINDLE

CDC LAPL

SP 67-008 SANITATION EQUIPMENT SEE ALSO TOILET-MARINE
SE 41-114 SAW-ABRASIVE-DISC, MASONRY
SF 41-115 SAW-BAND

SG SG- GENERATOR-SIGNAL (ELEX/ORD)
SH S- SHELTER (ELEX)
SI 54-016 COMPOSING MACHINE-PHOTO PRINTING
SJ 41-120 SAW- POWER HACK
SK 43-017 SAW BAND, MEAT CUTTING
SL 41-078 SAW SETTING MACHINE

SM SM- SIMULATORS (ELEX/ORD)
SN SN- SYNCHRONIZERS (ELEX)
SO NOT ASSIGNED
SP 83-010 SEAL-SWIVEL JOINT TYPE
SO 41-145 SEALING MACHINE-HEAT
SR 07-029 HEATER-SPACE, MULTI-FUEL WITH BLOWER
SS 87-006 SELECTOR-SPEED SENSITIVITY
ST ST- STRAPS (ELEX)
SU SU- OPTICAL UNITS (ELEX)
SV 67-010 SEWAGE TREATMENT SYSTEM-MULTI TOILETS OR URINALS
SW 41-080 SEWING MACHINE-HOUSEHOLD AND INDUSTRIAL
SX 83-017 SHAFT-PROPULSION, SHIP
SY 41-119 SAW-JIG, WOOD WORKING
SZ 83-002 SEAL-STERN TUBE SHAFT
SO 43-023 SINK-SCULLERY
SI 41-123 SHAPER-METAL CUTTING AND WOODWORKING
S2 41-096 BENDING OR FOLDING MACHINE-MANUAL
S3 99-007 SHELL-MISSILE TUBE
S4 85-014 SHOCK ABSORBER-GAS, OIL OR PNEUMATIC
S5 41-081 SHOE FINISHING AND STITCHING MACHINE
S6 991 SHOP EQUIPMENT AND ACCESSORIES ON SHIPS
S7 40-005 SHUTTER
S8 41-125 SIEVE-FOUNDRY
S9 43-052 SIFTING MACHINE-FLOUR, ELECTRIC
TA TA- TELEPHONE APPARATUS (ELEX)
TB TB- TOWED BODY (ELEX)
TC TC- TOWED CABLE (ELEX)
TD TD- TIMING DEVICES (ELEX)
TE 92-007 TANK-LIQUID STORAGE
TF TF- TRANSFORMERS (ELEX)
TG TG- POSITIONING DEVICES-TILT AND/OR TRAIL (ELEX)
TH TH- TELEGRAPH APPARATUS (ELEX)
TI 61-107 TRANSDUCER-FUNCTIONAL PICKUP
TJ 88-049 VALVE-MANEUVERING AND THROTTLE
TK TK- TOOL KITS (ELEX)
TL TL- TOOLS (ELEX)
TM 88-250 VALVE-MANUAL RESET
TN TN- TUNING UNITS (ELEX)
TO NOT ASSIGNED
TP AN/ A INVISIBLE LIGHT, HEAT RADIATION
TO 92-012 TANK-ACCUMULATOR, HYDRAULIC
TR TR- TRANSDUCERS (ELEX)

TS TS- TEST AND MEASURING EQUIPMENT NOT OTHERWISE CLASSIFIED (ELEX/ORD)
TT TT- TELETYPE WRITER AND FACSIMILE APPARATUS (ELEX)

CDC LAPL

TU 52-048 COMPENSATOR-HYDRAULIC
TV TV- TESTER-TUBE (ELEX)
TW TW- TAPE UNITS-USED FOR OPERATIONAL TEST AND CHECK OUT (ELEX)
TX T- TRANSMITTERS-ALL TYPES EXCEPT TELEPHONE (ELEX)
TY 31-006 TENSIONING DEVICE-COUNTERWEIGHT
TZ 46-002 TEST EQUIPMENT-ANALYZER
T0 41-149 PUMP-AIRLESS SPRAY PAINT
T1 46-006 TEST FIXTURES, SETS, STANDS AND CALIBRATORS, ALL TYPES
T2 41-150 CLEANER-VACUUM, ELECTRIC
T3 43-029 TOASTER-ELECTRIC, INTERMITTENT
T4 43-030 MIXER AND TANK-FLUID ELECTRIC
T5 43-058 FOOD CUTTER AND MIXER-ELECTRICAL
T6 43-061 COMPACTOR-TRASH
T7 46-013 TORSION METER-PROPULSION SHAFTING
T8 49-010 FILTER-AIR, ELECTROSTATIC

T9 41-132 TEST EQUIPMENT-MISCELLANEOUS (HME/CRC)
UA U- CONNECTORS-AUDIO AND POWER (ELEX)
UB C35 LAUNDRY EQUIPMENT AND ACCESSORIES
UC C22 STEERING GEAR, EMERGENCY
UD C21 HYDRAULIC FILTER UNIT, PORTABLE
UE C30 PORTABLE CLEATS
UF C23 INDUSTRIAL GASES GENERATING, HANDLING AND STORAGE
UG UG- CONNECTORS-RF (ELEX)
UH DIRECTOR-WEAPON SYSTEM
UI NOT ASSIGNED
UJ 88-014 VALVE-GATE, HYDROCARBON FUEL SERVICE
UK 99-018 CABLE ASSEMBLY-ELECTRICAL
UL 99-031 DISPENSER-CHAFF
UM 88-032 VALVE-REFRIGERATION SHUT OFF 3/4 IN AND LARGER
UN 52-006 MISSILE HANDLING SYSTEM-HYDRAULIC
UO NOT ASSIGNED
UP 41-071 MAGNETIC INSPECTION UNIT PORTABLE
UQ 50-003 PANEL-TEST ELECTRICAL
UR C27 CARGO HANDLING ACCESSORIES
US 50-006 PANEL-INTERIOR COMMUNICATION
UT 50-008 PANEL-GYRO OR DEAD RECKONING CONTROL
UU 86-004 SAFELIGHT-DARKROOM, PHOTOGRAPHIC
UV 29-023 PLOTTING AND TRACING EQUIPMENT
UW 55-004 REEL-CABLE
UX 19-002 RELAY-ELECTRICAL SEE ALSO TEST EQUIPMENT
UY 55-001 REELING MACHINE-CABLE
UZ 46-003 RECORDER-ELECTRICAL AND ELECTRONIC
U0 41-118 SAW-CIRCULAR
U1 SHIELD ASSEMBLY-WEAPON SYSTEM
U2 TRAIN POWER DRIVE ASSEMBLY-WEAPON SYSTEM
U3 ELEVATION POWER DRIVE ASSEMBLY-WEAPON SYSTEM
U4 TRAIN TRANSMISSION ASSEMBLY-WEAPON SYSTEM
U5 ELEVATION TRANSMISSION ASSEMBLY-WEAPON SYSTEM
U6 TRAIN RECEIVER REGULATOR-WEAPON SYSTEM
U7 ELEVATION RECEIVER REGULATOR-WEAPON SYSTEM
U8 CONTROL ASSEMBLY-WEAPON SYSTEM
U9 FUSE SETTER ASSEMBLY-WEAPON SYSTEM
VA 89-103 VALVE-BALANCING
VB 88-149 VALVE-ANGLE
VC 88-039 VALVE-ASTERN

CDC LAPL

VP 838 ENVIRONMENTAL CONTROL SYSTEM SPARES AND REPAIR PARTS
VE 88-001 VALVE-BALL
VF CONTROL-LAUNCHER
VG 88-038 VALVE-BUTTERFLY
VH V- VEHICLES-CARTS, DOLLIES, VANS U/W ELECTRONIC EQUIPMENT (ELEX)
VI 88-057 VALVE-GLOBE
VJ 88-036 VALVE-CHECK
VK 88-175 VALVE-SPECIAL
VL 88-019 VALVE-PILOT AND LINE PRESSURE OPERATED, DIAPHRAGM AND PISTON TYPES
VM 88-171 VALVE-RELAY AIR, DIAPHRAGM AND PISTON TYPES
VN 88-026 VALVE-EXPANSION
VO NOT ASSIGNED
VP 88-212 VALVE-FLOAT
VQ 88-024 VALVE-FUEL OIL REGULATING
VR 88-013 VALVE-GATE, ALL TYPES EXCEPT HYDROCARBON FUEL SERVICE
VS VS- SIGNALING EQUIPMENT-VISUAL (ELEX)
VT 88-124 VALVE-LINEAR, DIRECTIONAL CONTROL
VU 88-189 VALVE-INSTANTANEOUS HEATER
VV 88-071 VALVE-NEEDLE
VW 88-217 VALVE-PILOT CONTROL, BELLOWS AND SOLENOID OPERATED
VX 88-033 VALVE-PLUG
VY 88-020 VALVE-PRESSURE REGULATING, STEAM SERVICE
VZ 88-025 VALVE-FLUSH
VO 88-102 VALVE-ROTARY, DIRECTIONAL CONTROL
VI 88-176 VALVE-EXHAUST AND RELIEF
V2 88-191 VALVE-FEEDWATER REGULATING
V3 87-013 VALVE - SEA, UNDERWATER LOG
V4 88-152 VALVE-MAIN BALLAST
V5 88-144 VALVE-MANIFOLD (EXCLUDES VALVE AND TRAP MANIFOLDS)
V6 88-216 VALVE-SOLENOID
V7 88-010 VALVE-TEMPERATURE REGULATING, AUTOMATIC OPERATION
V8 88-166 VALVE-HINGE TYPE
V9 88-055 VALVE-Y
WA 91-001 WASHING MACHINE - LAUNDRY
WB 41-086 WELDING AND BRAZING MACHINE - BAND SAW BLADE
WC 82-002 WELDING MACHINE - RESISTANCE
WD WD- CABLE, 2 CONDUCTOR, NON-RF (ELEX)
WE 82-005 WELDING MACH-ARC, ADJUST, CONST VLTG CR CONST CURR TRANSFORMER RECTIFIER
WF WF- CABLE, 4 CONDUCTOR, NON-RF (ELEX)
WG 82-001 WELDING SET - TUNGSTEN ARC, INERT GAS SHIELDED, NONCONSUMABLE ELECTRODE
WH 82-004 WELDING SET - ARC, INERT GAS SHIELDED, CONSUMABLE ELECTRODE
WI NOT ASSIGNED
WJ 82-007 WELDING SET - STUD, ELECTRIC ARC
WK 62-001 WINCH - HAND OPERATED
WL 62-002 WINCH - STEAM OPERATED
WM WM- CABLE, MULTIPLE CONDUCTOR, NON-RF (ELEX)
WN 62-004 WINCH - ELECTRIC - HYDRAULIC
WO NOT ASSIGNED
WP 62-006 WINCH - ENGINE DRIVEN, GASOLINE OR DIESEL
WQ 62-007 WINCH - PNEUMATIC DRIVE
WR 41-087 WINDING MACHINE COIL
WS WS- CABLE, SINGLE CONDUCTOR, NON-RF (ELEX)
WT WT- CABLE, 3 CONDUCTOR, NON-RF (ELEX)
WU 63-003 WINDLASS - ELECTRICAL MECHANICAL SEE ALSO ANCHOR HANDLING ACCESSORIES
WV 63-004 WINDLASS - HAND OPERATED SEE ALSO ANCHOR HANDLING ACCESSORIES
WW 31-025 WINDOW - OBSERVATION, OPTICAL, PORTLIGHT

CDC LAPL

WX 99-001 WINDOW - NON ICING
WY 35-001 WIPER-WINDOW PNLM, RTY OR VERT TYPE, ELEC OR MNL (HM&E/ORD)
WZ 35-002 WIPER - WINDOW, PENDULUM TYPE, PNEUMATIC
W0 FIRING CUTOFF ASSY-WEAPON SYSTEM
W1 CARRIAGE ASSEMBLY-WEAPON SYSTEM
W2 STAND ASSEMBLY-WEAPON SYSTEM
W3 SLIDE ASSEMBLY-WEAPON SYSTEM
W4 RAMMER ASSEMBLY-WEAPON SYSTEM
W5 HOUSING ASSEMBLY-WEAPON SYSTEM
W6 GUN BARREL ASSEMBLY-WEAPON SYSTEM
W7 GAS EJECTOR ASSEMBLY-WEAPON SYSTEM
W8 EMPTY CASE EJECTOR ASSY-WEAPON SYSTEM
W9 HOIST ASSEMBLY-WEAPON SYSTEM
XA C00 COMPRESSOR GAS TURBINE REPAIR PARTS
XB BULKHEADS-STRUCTURAL
XC CANVAS
XD DECK COVERINGS
XE E34 MISCELLANEOUS FLAG ALLOWANCES, MESSING GEAR
XF C36 SURVIVAL EQUIPMENT
XG C41 LIFTING AND HANDLING GEAR MAIN AND AUXILIARY MACHINERY
XH C43 TOOLS AND ACCESSORIES MAIN PROPULSION SHAFTING
XI C38 ENVIRONMENTAL CONTROL SYSTEM APPLIANCES
XJ C47 PUMPS, PORTABLE
XK C51 BOILER TOOLS AND ACCESSORIES
XL C58 TOOLS AND ACCESSORIES DISTILLING PLANT
XM C59 TOOLS AND ACCESSORIES REFRIGERATION SYSTEM
XN DOOR-NON STRUCTURAL
XO NOT ASSIGNED
XP C48 HOSE AND MISCELLANEOUS HOSE FITTINGS
XQ C61 TOOLS AND ACCESSORIES GENERATORS
XR C18 RIGGING
XS SHEATHING
XT C62 TOOLS AND ACCESSORIES ELECTRIC POWER DISTRIBUTION
XU C64 LIGHT EXTENSION
XV C65 PORTABLE INTERIOR COMMUNICATION EQUIPMENT
XW C66 LIGHT SIGNAL PORTABLE
XX C67 ELECTRICAL AND ELECTRONIC HAND TOOLS
XY C69 IOTC SUPPORT EQUIPMENT
XZ C70 FLAGS AND PENNANTS
X0 C75 ASROC/TORPEDO/MINE HANDLING
X1 DECK
X2 DOME-SONAR(STRUCT AND NON STRUCT)
X3 BALLAST
X4 PLATFORM DECK
X5 FLAT
X6 C77 NBC WARFARE EQUIPMENT
X7 C81 MINESWEEPING EQUIPMENT
X8 C83 AIRCRAFT HANDLING AND STOWAGE
X9 C85 PROJECTION EQUIPMENT AND ACCESSORIES
YA 54-009 TABLE-LITHOGRAPHIC LAYOUT
YB 60-006 STEERING GEAR
YC 46-C11 TRITIUM AIR MONITOR
YD 85-C36 TROLLEY - MONORAIL AND BI-RAIL
YE 85-018 TRUCK/DOLLY/ CRADLE ASSEMBLY SEE ALSO CARGO HANDL ACCY (HM&E/ORD)

CDC LAPL

YF 41-139 TUBE AND FLUE CLEANER - AIR MOTOR DRIVEN
YG 41-140 TUBE AND FLUE CLEANER - ELECTRIC MOTOR DRIVEN
YH 05-001 TURBINE-STEAM, MAIN PROPULSION
YI NOT ASSIGNED
YJ 61-029 CONTROL PANEL-AUTOMATIC OR MANUAL
YK 61-048 ELECTRONICS SUB-ASSEMBLIES
YL 82-003 WELDING MACHINE - ARC, DRIVEN BY GAS OR DIESEL INTERNAL COMBUSTION ENGINE
YM 61-065 INDUCTOR-VERNIER
YN 82-006 WELDING MACHINE - ARC, ELECTRIC MOTOR DRIVEN
YO NOT ASSIGNED
YP 62-003 WINCH - ELECTRIC
YQ 63-001 WINDLASS - STEAM DRIVEN SEE ALSO ANCHOR HANDLING ACCESSORIES
YR 05-006 TURBINE-STEAM, AUXILIARY
YS 05-022 TURBINE - WATER DRIVEN
YT 05-028 TURBINE - GAS, PROPULSION AND AUXILIARY SERVICE OVER 2000 HCRSEPOWER
YU 05-029 TURBINE - GAS, PROPULSION AND AUX SEPV 2000 HCRSEPOWER OR UNDER
YV 05-025 TURBINE AND FAN, INTEGRAL FORCED DRAFT AIR SERVICE FOR MAIN BOILER
YW 05-019 TURBINE CONTROL - PROPULSION
YX 05-024 TURBO/SUPERCHARGER - DIESEL ENGINE
YY 85-003 TURNTABLE - TROLLEY OR BALL TYPE, MANUAL OR POWER DRIVEN
YZ 85-009 TORPEDO HANDLING UNIT (HME/ORD)

YO C12 HULL FITTINGS, LASHING GEAR AND ACCESS CLOSURES
YI 53-002 CAPSTAN-POWER OPERATED, ELECTRIC OR HYDRAULIC
Y2 63-002 WINDLASS - ELECTRIC HYDRAULIC SEE ALSO ANCHOR HANDLING ACCESSORIES
Y3 C87 TEST, MEASURING AND INDICATING EQUIPMENT
Y4 C90 RADIATION MONITORING AND COUNTERMEASURES
Y5 C93 SHIPBOARD FIREFIGHTING AND ACCESSORIES

Y6 A00 ORDNANCE TOOLS AND ACCESSORIES (AEL/CRD)
Y7 WFLDMENT
Y8 C94 SALVAGE TOOLS AND EQUIPMENT
Y9 C95 DIVING EQUIPMENT
ZA 61-086 STAND, CONTROL-STEERING
ZB 61-087 STAND, CONTROL PROPULSION
ZC 91-009 STARCH COCKER-LAUNDRY
ZD 61-482 VALVE OPERATOR-HYDRAULIC OPERATOR
ZE 34-001 STARTER-ENGINE, ELECTRICAL
ZF 34-002 STARTER-ENGINE, HYDRAULIC
ZG 34-003 STARTER-ENGINE, DIRECT COMBUSTION AND/OR GAS TURBINE
ZH 34-005 STARTER-ENGINE, AIR MOTOR OR AIR TURBINE TYPE
ZI NOT ASSIGNED
ZJ 60-001 STEERING GEAR-ELECTRO-HYDRAULIC, MARINE, LINK, TILLER TYPE
ZK 60-003 STRNG GEAR-ELEC MCH, MRN, DRN&CBL/CBLECC, GRECC, HND OP TY
ZL 60-007 STEERING GEAR-ELECTRIC, STEER MOTOR-CHAIN DRIVE TYPE
ZM ZM- IMPEDANCE MEASURING DEVICES (ELEX)
ZN 60-008 STEERING GEAR-EMERGENCY SUBMERSIBLE TYPE
ZO NOT ASSIGNED
ZP 61-027 STEERING HEAD-GYROPILOT
ZO 54-020 STITCHER-BOOK AND PAMPHLET
ZR 64-005 STRAINER-PRESSURE, FIRE HOSE WITH BALL VALVE
ZS 64-014 FIRE EXTINGUISHING SYSTEM-TWIN AGENT
ZT C99 TOOLS AND EQUIPMENT MISCELLANEOUS
ZU 64-015 FIRE EXTINGUISHING UNIT-DRY CHEMICAL
ZV D39 DSRV RESCUE CONTROL CENTER
ZW 64-016 NOZZLE ASSEMBLY-TWIN AGENT

CDC LAPL

ZX 41-113 SAND MULLER
ZY 75-001 STRAINER-SEDIMENT
ZZ MISCELLANEOUS ITEMS NOT OTHERWISE CODED
20 E24 MISCELLANEOUS FLAG ALLOWANCES. NAVIGATION INSTRUMENTS
21 61-072 CONTROL-HUMIDITY
22 41-129 SURFACER-WOODWORKING
23 85-027 SWAY BRACE ASSEMBLY-ELECTRIC CHAIN HOIST DRIVE
24 89-005 SWIMMERS RECOVERY SYSTEM
25 E36 MISCELLANEOUS FLAG ALLOWANCES. VACUUM CLEANER
26 61-074 COMPUTER-SHIPBOARD
27 E95 MISCELLANEOUS FLAG ALLOWANCES. PROJECTION EQUIPMENT
28 61-389 BELLOWS ASSEMBLY-PRESSURE RELIEF
29 NOT ASSIGNED
0A NOT ASSIGNED
0B NOT ASSIGNED
0C TELEMETERING SETS
0D NOT ASSIGNED
0E NOT ASSIGNED
0F NOT ASSIGNED
0G NOT ASSIGNED
0H NOT ASSIGNED
0I NOT ASSIGNED
0J NOT ASSIGNED
0K NOT ASSIGNED
0L NOT ASSIGNED
0M NOT ASSIGNED
0N NOT ASSIGNED
0O NOT ASSIGNED
0P NOT ASSIGNED
0Q NOT ASSIGNED
OR OR ORDAITS AND ORDNANCE MODIFICATIONS-OTHER THAN SWITCHBOARD
OS RS ORDAITS AND ORDNANCE MODIFICATIONS-SWITCHBOARD ONLY
OT NOT ASSIGNED
OU NOT ASSIGNED
OV NOT ASSIGNED
OW NOT ASSIGNED
OX NOT ASSIGNED
OY NOT ASSIGNED
OZ NOT ASSIGNED
00 NLAPLW NLAPLW-ITEM LISTED BY SPCC AS NOT LAPL WORTHY
00 INCOMP INCOMP-ITEM LISTED BY SPCC AS INCOMPLETE
01 06-001 COMPRESSOR-RECIPROCATING, OTHER
02 06-004 COMPRESSOR-CENTRIFUGAL, REFRIGERATION
03 06-201 COMPRESSOR-RECIPROCATING, AIR, HIGH, PRESSURE
04 06-202 COMPRESSOR-RECIPROCATING, AIR, LOW, PRESSURE
05 06-203 COMPRESSOR-CENTRIFUGAL, AIR, LOW PRESSURE
06 06-204 COMPRESSOR-ROTARY, AIR, LOW PRESSURE
07 06-501 COMPRESSOR-VAPOR ROTARY
08 AVIATION ORDNANCE EQUIPMENT
09 04-001 CONDENSER-REFRIGERATION, WATER, COOLED
1A VALVE-SCUPPER (INCL. DECK DRAIN VALVES)
1B 41-004 BOWTH-SPRAYING
1C 39-005 CLUTCH-FRICTION
1D B37 PROPANE GAS AND CYLINDERS
1E MACK
1F 14-007 FUSE UNIT ASS

CDC LAPL

IG 41-045 GRINDING MACHINE-UTILITY (INCL BUFFING CAPABILITY)
IH 76-006 HYPOCHLORINATION UNIT
II NOT ASSIGNED
IJ 01-012 PUMP-FUEL, ALL TYPES INCLUDING ELECTRIC DRIVE DESIGN
IK 54-001 PUNCHING MACHINE-PAPER
IL 61-049 SYNCHRO-RECEIVER, TRANSMITTER, RECEIVER, TRANSMITTER
IM 17-018 MOTOR-AC/DC MAIN PROP, UNLIMITED HORSEPOWER
IN C32 FURNISHINGS AND CUTFITTINGS
IO NOT ASSIGNED
IP 39-003 POWER TAKE OFF-ACCESSORY DRIVE
IQ 01-005 PUMP-ROTARY, POWER DRIVEN
IR 43-057 RINSE-SANITIZER
IS 86-001 SINK-PHOTOGRAPHIC PROCESSING
IT 01-013 PUMPING UNIT-CENTRIFUGAL, POWER DRIVEN, AIRCRAFT FUELING
IU HEAD-SPRINKLER-FIRE PROTECTION
IV 88-004 VALVE-SAFETY RELIEF, MAIN PROPULSION BOILER
IW NOT ASSIGNED
IX 52-014 CYLINDER-ACTUATING LINEAR SEE ALSO JACK ASSEMBLY/SOCK AB
IY 57-008 CRANE-ASROC MISSILE
IZ NOT ASSIGNED
JO NOT ASSIGNED
J1 04-100 CONDENSER-STEAM, ALL TYPES
J2 01-003 PUMP-CENTRIFUGAL, MAIN CONDENSER CIRCULATING
J3 01-004 PUMP-ROTARY, POWER DRIVEN, CAM AND PLUNGER DESIGN
J4 01-006 PUMP-ROTARY, POWER DRIVEN, IMPELLER DESIGN WITH TIMING GEARS
J5 01-007 PUMP-ROTARY, POWER DRIVEN, EXTERNAL GEAR DESIGN
J6 32-009 CONDENSING UNIT-REFRIGERATION
J7 99-023 CONNECTOR-ELECTRICAL SEE BOX-ELECTRICAL
J8 61-030 CONSOLE-CONTROL AND POWER
J9 09-004 CONTROL-BATTERY CHARGER
JA LAUNCHING SYSTEM (MISSILE/ROCKET)

JB 99-008 BOX-ELECTRICAL (HME/CRD)
JC 39-006 CLUTCH-MAGNETIC
JD 844 PROPELLER, SPECIAL TOOLS AND HANDLING GEAR
JE LAUNCHERS (MISSILE/ROCKET)
JF 850 GOVERNOR OVERSPEED SPARES
JG 25-024 GYRO COMPASS-ARMA MK 7,8,9,10,21,22,24, & 26
JH 31-003 HATCH COVER
JI NOT ASSIGNED
JJ ANTI-ICING SYSTEM
JK 41-074 PUNCHING, SHEARING, AND NIBBLING MACHINE-METAL
JL 32-034 SEPARATOR-OIL, REFRIGERANT
JM 41-089 MOTOR-PNEUMATIC
JN 83-037 OIL DISTRIBUTION BOX OR OIL INJECTOR ASSEMBLY
JO NOT ASSIGNED
JP 52-047 POWER UNIT-HYDRAULIC
JQ 39-001 CLUTCH-POSITIVE DRIVE AND ROTATING ELEMENT
JR 41-075 RIVETING MACHINE-ELECTRIC OR PNEUMATIC
JS 41-082 SKIVING AND BEVELING MACHINE-SHOE, SOLE, HAND OPERATED
JT 41-085 THREADING MACHINE-PIPE AND BOLT SEE ALSO SHOP ACCESSORIES-TOOLS X ECF
JU MAGAZINES-WEAPON SYSTEM
JV GUN MOUNTS
JW NOT ASSIGNED
JX CASTING
JY 57-009 CRANE-ELECTRIC HYDRAULIC

CDC LAPL

22 21-011 SWITCH-FLOAT, LIQUID LEVEL, FLOW DETECTING
20 61-008 CONTROL-STEERING SYSTEM
21 61-009 CONTROL-MECHANICAL
22 NOT ASSIGNED
23 61-015 CONTROL-NAVIGATIONAL LIGHT
24 61-022 CONTROL-ACOUSTIC DEVICE
25 61-024 CONTROL-MECHANICAL PUSH PULL STROKE
26 61-026 CONTROL-ELECTRIC LIGHT
27 61-040 CONTROL-VALVE OPERATOR
28 61-064 CONTROL-HUMIDITY
29 61-067 CONTROL-REMOTE TRANSMITTERS AND RECEIVERS
3A NOT ASSIGNED
3B 80-001 BRAKE-ELECTRIC, SHOE OR DISC, SOLENOID
3C 39-007 CLUTCH-MAGNETIC PARTICLE
3D 841 PROPULSION MAIN CRUISE DIESEL ENGINE EQUIPMENT AND ACCESSORIES
3E NOT ASSIGNED
3F FRAME-STRUCTURAL
3G 25-028 GYRO COMPASS-SPERRY MK 11, 14, 17, 18, & 19
3H NOT ASSIGNED
3I NOT ASSIGNED
3J 21-018 SWITCHING UNIT-POWER TRANSFER
3K 76-001 PURIFIER-CENTRIFUGAL
3L 93-009 SEPARATOR MOISTURE
3M 52-046 MOTOR-HYDRAULIC
3N 01-018 PUMP-CENTRIFUGAL, SINGLE STAGE, CLOSE-COUPLED, NAVY STD
3O NOT ASSIGNED
3P 61-091 POWER UNIT-GYRO PILOT
3Q 01-009 PUMP-ROTARY, POWER DRIVEN, VANE DESIGN, FIXED OR VAR DELIVERY
3R 87-002 RODMETER-UNDERWATER LOG SYSTEM
3S 32-020 SODA FOUNTAIN
3T 61-056 THRUSTER-MOTOR DRIVEN, HYDRAULICALLY OPERATED
3U 858 DISTILLING PLANT ACCESSORIES
3V 16-016 VAPORIZER SYSTEM - LIQUID OXYGEN OR NITROGEN
3W AN/ C CARRIER
3X 06-005 COMPRESSOR-RECIPROCATING, REFRIG, VERT OPR, SEMI-HERM
3Y 57-010 CRANE STERN
3Z AN/ D RADIAC
30 61-071 CONTROL-PHOTOELECTRIC CELL
31 61-079 CONTROL-CONSTANT FREQUENCY
32 61-096 CONTROL-TRANSMISSION REVERSING MECHANISM
33 61-108 CONTROL-PERISCOPE
34 61-110 CONTROL-SENSOR, DEPTH AND TRIM
35 61-402 CONTROL-FLAME FAILURE
36 61-444 CONTROL-GENERATOR, COOLER FEEDWATER
37 61-481 CONTROL-SERV, CONTROLLABLE PITCH PROPELLERS
38 87-004 CONTROL-UNDERWATER LOG
39 61-019 CONTROL TRANSMITTER-PRESSURE DIFFERENTIAL
4A AN/ G TELEGRAPH OR TELETYPE
4B BULKHEAD-NONSTRUCTURAL
4C 39-013 CLUTCH- ALL OTHER TYPES
4D 31-019 DOOR-MISSILE TUBE
4E AN/ I INTERPHONE AND PUBLIC ADDRESS
4F FORGING
4G 25-039 GYRO COMPASS-SPERRY MK 23 AND 27
4H AN/ J ELECTROMECHANICAL OR INERTIAL WIRE COVERED
4I NOT ASSIGNED

CDC LAPL

4J 22-001 SWITCHBOARD-DEGAUSSING
4K 61-012 CONTROL-DEGAUSSING
4L 61-011 SERVO GEAR TRAIN
4M 18-001 MOTOR GENERATOR
4N 31-002 OPERATING MECHANISM-DOOR, RAMP, STERN GATE & BRIDGE
4O NOT ASSIGNED
4P 41-069 PRESS-GRIMMET AND EYELET

4Q AN/ K TELEMETTING (ELEX/ORD)
4R 31-019 RUDDER-INCLUDING STOCKS, POSTS AND CARRIERS
4S 41-127 SOLDER AND DESOLDER UNIT-ELECTRIC
4T 61-005 TIMER
4U AN/ L COUNTERMEASURES
4V 43-014 VEGETABLE PEELING MACHINE - ELECTRIC
4W AN/ M METEOROLOGICAL
4X C33 CLOTHING STANDARD OUTFIT, AIR PURIFICATION AND LIFE PRESERVERS
4Y 57-011 CRANE-HEAVY EQUIPMENT
4Z 01-019 PUMP CENTRIFUGAL, POWER DRIVEN, PERIPHERAL DESIGN
40 61-075 CONTROL-STEERING AND DIVING ASSEMBLY
41 61-062 CONTROL-PNEUMATIC
42 61-066 CONTROL-TELEMETRIC STEERING
43 61-089 CONTROL-SPLIT PLANE
44 61-132 CONTROL-FEED WATER SYSTEM
45 61-251 CONTROL- PRESSURE, TEMP, LEVEL AND FLOW
46 83-040 CONTROL-CONTROLLABLE PITCH PROPELLER
47 15-002 CONTROLLER/STARTER, AC
48 AN/ N SOUND IN AIR
49 AN/ P RADAR
5A AN/ Q SONAR AND UNDERWATER SOUND
5B 80-002 BRAKE-ELECTRIC, MOTOR OPERATED
5C 43-015 COFFEE MAKER
5D 31-017 DOOR-HINGED TYPE, POWER OPERATED
5E AN/ R RADIO
5F FOUNDATION
5G 25-008 GYRO COMPASS EQUIPMENT-AMPLIFIER-SYNCHRO SIGNAL
5H AN/ S SPECIAL TYPES MAGNETIC, ETC., OR COMBINATIONS OF TYPES
5I NOT ASSIGNED
5J 22-002 SWITCHBOARD-INTERIOR COMMUNICATION
5K PLATFORM-SERVICE
5L STRUCTURE-DECKHOUSE
5M AN/ T TELEPHONE (WIPE)
5N 28-009 OPTICAL NAVIGATIONAL AIDS ALSO SEE SPECIFIC EQUIPMENT
5O NOT ASSIGNED
5P 41-058 PRESS-HYDRAULIC, MANUAL OR POWER OPERATED
5Q 01-008 PUMP-ROTARY, POWER DRIVEN, INTERNAL GEAR DESIGN
5R 821 HYDRAULIC SYSTEM TOOLS AND REPAIR PARTS
5S 41-126 SOLDERING AND BRAZING OUTFIT, ELECTRIC
5T TRUNK-STRUCTURAL
5U AN/ V VISUAL AND VISIBLE LIGHT
5V 87-007 VENT, AIR - U/W LOG EQUIPMENT
5W AN/ W ARMAMENT (PECULIAR TO ARMAMENT, NOT OTHERWISE COVERED)
5X 01-021 PUMP-CENTRIFUGAL, TURBINE DRIVEN, GASLINE SERVICE
5Y 57-013 CRANE-GANTRY
5Z 862 PORTABLE STORAGE BATTERIES AND POWER DISTRIBUTION ACCESSORIES
50 AN/ X FACSIMILE OR TELEVISION
51 AN/ Y DATA PROCESSING

CDC LAPL

52 AUTOMOTIVE & CONSTRUCTION EQUIPMENT (INCL ALL COMMODITY CLASS 95)
53 MISC. PARTS LISTS FOR SHIPS (INCL ALL APLS STARTING WITH 89000)
54 MAINTENANCE & REPAIR SHIP EQUIPMENT (INCL ALL COMMODITY CLASS 12)
55 CHEMICAL WARFARE EQUIPMENT (INCL ALL COMMODITY CLASS 47)
56 SICK-BAY EQUIPMENT (INCL ALL COMMODITY CLASS 84)
57 01-020 PUMP-CENTRIFUGAL, POWER DRIVEN, HCRIZNTAL, SPLIT CASE DESIGN
58 RIGGING & RIGGING GEAR (INCL ALL COMMODITY CLASS 90)
59 CONSTRUCTION EQUIPMENT (INCL ALL COMMODITY CLASS 96)
6A 99-015 ARRESTOR-ELECTRICAL
6B 01-028 PUMP-CENTRIFUGAL, TURBINE DRIVEN, HCRIZNTAL, CLOSE-COUPLED
6C 54-023 COLLATOR
6D 31-008 DOOR-METAL SLIDING
6E SPECIAL POWER PLANT EQUIPMENT (INCL ALL COMMODITY CLASS 98)
6F NOT ASSIGNED
6G 25-010 GYRO COMPASS EQUIPMENT-ALARMS-AUDIBLE & VISIBLE
6H NOT ASSIGNED
6I NOT ASSIGNED
6J 22-004 SWITCHBOARD-PROPULSION
6K PYROTECHNIC EQUIPMENT
6L SEA CHESTS
6M E99 MISCELLANEOUS FLAG ALLOWANCES, FURNITURE AND MISC. EQUIPMENT
6N 87-012 OSCILLATOR AND AMPLIFIER-U/W LOG EQUIPMENT
6O NOT ASSIGNED
6P 41-100 PRESS-ARBOR, MANUAL OPERATION
6Q NOT ASSIGNED
6R NOT ASSIGNED
6S 61-046 SOLENOID-ELECTRIC
6T 43-026 TOASTER-ELECTRIC
6U NOT ASSIGNED
6V 31-020 VENTILATOR - DECK
6W NOT ASSIGNED
6X 816 ACCESS CLOSURES OPERATING SPARES
6Y 57-016 CRANE-KINGPOST
6Z NOT ASSIGNED
60 15-010 CONTROLLER, DC
61 NOT ASSIGNED
62 25-014 CONVERTER-SIGNAL DATA
63 01-022 PUMP-CENTRIFUGAL, POWER DRIVEN, FOR COMMERCIAL DISHWASHING MACHINE
64 01-023 PUMP-CENTRIFUGAL, POWER DRIVEN, SUBMARINE TRIM AND DRAIN SERVICE
65 59-006 CONVEYOR-POWER OPERATED, BELT OR VERTICAL TRAY TYPE
66 NOT ASSIGNED
67 03-001 COOLER-FLUID, SHELL/TUBE CONSTRUCTION
68 01-026 PUMPING UNIT-CENTRIFUGAL, ELECTRIC MOTOR DRIVEN, FOR STEAM SYSTEMS
69 03-002 COOLER-FLUID, TYPE B
7A APPENDAGES-SHELL
7B 80-003 BRAKE-PNEUMATIC
7C 41-009 COLLECTOR UNIT-DUST
7D 43-C54 DOUGH INTERMEDIATE PROCCING MACHINES
7E NOT ASSIGNED
7F NOT ASSIGNED
7G 25-011 GYRO COMPASS EQUIPMENT-CABINET-GYRO & GUID COMP STOR
7H NOT ASSIGNED
7I NOT ASSIGNED
7J 22-009 SWITCHBOARD-ALARM
7K NOT ASSIGNED
7L STANCHIONS

CDC LAPL

7M 51-006 MOUNT-RESILIENT
7N 41-090 OVEN-THERMAL DRYING. ELECTRIC
7O NOT ASSIGNED
7P 44-008 PRESSURE REDUCING STATION
7Q NOT ASSIGNED
7R NOT ASSIGNED
7S 81-001 SOOT BLOWERS
7T TORPEDO TUBE ASSEMBLY
7U NOT ASSIGNED
7V 61-054 VERTICAL REFERENCE
7W NOT ASSIGNED
7X NOT ASSIGNED
7Y 41-039 CUT-OFF MACHINE-ABRASIVE DISK. METAL CUTTING
7Z 21-023 SWITCH-PRESSURE AND/OR THERMOSTATIC
70 03-003 COOLER-FLUID, ENGINE JACKET WATER HULL MOUNTED
71 03-004 COOLER, FLD SMPL WTR TYPE I SHL/CL DSA. TYP II DB TB
72 03-006 COOLER, AIR
73 03-011 COOLER-FLUID, RADIATOR ENGINE COOLANT
74 03-015 COOLER-AMINE
75 32-011 COOLER-AIR FLOW UNIT
76 32-010 COOLING COIL-AIR, DUCT TYPE AND GRAVITY TYPE
77 46-005 COUNTERS AND TOTALIZERS
78 NOT ASSIGNED
79 51-001 COUPLING-FLEXIBLE. SCUND ISOLATION
8A NOT ASSIGNED
8B 80-004 BRAKE-MANUAL
8C 28-012 COMPASS COMPENSATING EQUIPMENT
8D 43-018 DOUGH MIXING MACHINES
8E NOT ASSIGNED
8F NOT ASSIGNED
8G 25-021 GYRO COMPASS EQUIPMENT-RELAY TRANSMITTER
8H NOT ASSIGNED
8J NOT ASSIGNED
8J 22-013 SWITCHBOARD-POWER
8K NOT ASSIGNED
8L 878 AMMUNITION HANDLING AND STOWAGE
8M 86-014 MOUNT-FILM SLIDE, PHOTOGRAPHIC
8N 43-019 RANGES AND OVENS-OIL BURNING-SEE ALSO GALLEY EQPMT
8O NOT ASSIGNED
8P 29-003 PRIMER-ENGINE STARTING, ETHER INJECTION
8Q 01-002 PUMP-RECIPROCATING, DIRECT ACTING AND POWER DRIVEN
8R NOT ASSIGNED
8S 25-017 STABILIZER-GYRC
8T 67-009 TOILET-MARINE
8U NOT ASSIGNED
8V 26-004 VIEWER - STILL PICTURE
8W NOT ASSIGNED
8X NOT ASSIGNED
8Y 02-004 BOILER-AUXILIARY, HP STEAM, OIL FIRED
8Z 21-006 SWITCHES-GENERAL
80 01-032 PUMP UNIT-CENTRIFUGAL, POWER DRIVEN, PORTABLE (SELF-CONTAINED)
81 78-001 COUPLING-FLEXIBLE, SHAFT
82 01-034 PUMPING UNIT-HYDRAULIC, AIR DRIVEN
83 NOT ASSIGNED
84 01-035 PUMP-CENTRIFUGAL, PWR DRIVEN, (MULTI-STAGE) VERT DEEPWELL TURB DESIGN
85 01-036 PUMP-JET, MAIN PROPULSION

CDC LAPL

86 01-037 PUMP-RECIPROCATING. AIR DRIVEN. MISCELLANEOUS SERVICE
87 78-004 COUPLING-FLEX. SFT. AUXILIARY SERVICE
88 02-002 BOILER-AUXILIARY. HP STEAM. WATER TUBE
89 02-003 BOILER-AUXILIARY. HP STEAM. HORIZONTAL FIRE TUBE
9A NOT ASSIGNED
9B 80-005 BRAKE-HYDRAULIC
9C COMPARTMENT
9D 43-032 DOUGH PROCESSING MACHINE-POWER AND MANUAL
9E NOT ASSIGNED
9F NOT ASSIGNED
9G 41-066 GRINDING MACHINE-TOOLS & CUTTERS
9H NOT ASSIGNED
9I NOT ASSIGNED
9J 22-021 SWITCHBOARD-STATIC GROUP CONTROL
9K NOT ASSIGNED
9L SMALL ARMS
9M 79-001 MUFFLER
9N GRATINGS. FLOOR PLATES
9O NOT ASSIGNED
9P 86-002 PRINTER-PHOTOGRAPHIC
9Q NOT ASSIGNED
9R NOT ASSIGNED
9S 31-029 STABILIZER-ACTIV FIN.RETRACTBLE & NONRETRACTBLE
9T C25 TOWING GEAR
9U NOT ASSIGNED
9V 86-006 VIEWER PRINTER - MICROFILM
9W NOT ASSIGNED
9X NOT ASSIGNED
9Y 54-013 CUTTER-PAPER. GUILLOTINE
9Z NOT ASSIGNED
90 NOT ASSIGNED
91 R20 WINCHES AND CAPSTANS REPAIR PARTS
92 78-011 COUPLING-RIGID. SHAFT
93 78-009 COUPLING-HYDRAULIC
94 78-012 COUPLING-CLAMP PIPE
95 78-013 COUPLING-ELECTRIC INDUCTION
96 93-019 COUPLING-HOSE. MISC SEE ALSO UNWAY REPLEN ACC
97 57-001 CRANE-BRIDGE CR CVERHEAD TRAVELING
98 57-002 CRANE-QUARTER
99 57-003 CRANE-JIB